



# TRANSPORT CANADA

Departmental Results Report  
2019-20



Transport  
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# Transport Canada

2019–20

## **Departmental Results Report**

The Honourable Marc Garneau, P.C., M.P.  
Minister of Transport

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## Minister's message

The fiscal year for 2019-20 ended just as Canadians were starting to wonder when the country could emerge from its temporary lockdown. At that point, it had only been a few weeks since a number of emergency measures were put in place to prevent the spread of the COVID-19 pandemic.

As we know now, there would be a long road ahead. A few weeks in, there was certainly an incredible amount of uncertainty.



The Departmental Results Report looks back on the fiscal year that concluded at the end of March 2020, but we cannot avoid mentioning the significant challenges that were emerging at the end of that timeframe.

With travel and shipping facing unprecedented challenges, and with the health and safety of Canadians at the forefront of our minds, I am extremely proud of the work that Transport Canada has done, and continues to do. With the National Emergency Coordination Centre ramped up, and many business practices changing and being updated to reflect the new reality, the 2019-20 fiscal year ended very differently than it began for everybody at Transport Canada.

Of course, it had been a busy year. There was a significant amount of work done across the country to improve transportation infrastructure thanks to the National Trade Corridors Fund. The first and second phases of the Air Passenger Protection Regulations came into effect, as did new rules for remotely piloted aircraft systems. The *Wrecked, Abandoned or Hazardous Vessels Act* also came into force, and Oceans Protection Plan continued efforts to protect our coasts and waterways for future generations, to make our marine safety system stronger, and our coastal ecosystems more protected, than ever before including a number of measures to protect marine mammals such as the Southern Resident killer whale and the North Atlantic right whale. We launched a very popular purchase incentive program for zero-emission vehicles. We reached important milestones for road safety, including the implementation of a Canada-wide standard for entry-level training of commercial motor vehicle drivers, and work with partners on a path forward to make school buses even safer. We strengthened Indigenous partnerships and community engagement. There were celebrations, such as the 75<sup>th</sup> anniversary of the International Civil Aviation Organization, which is headquartered in Montréal, but there was also tragedy, including when Ukraine International Airlines Flight PS 752 was shot down near Tehran, with 57 Canadians and others with close ties to our country among the lives lost. There were also significant challenges in the rail sector.

This Departmental Results Report is an opportunity to look back and reflect on achievements and accomplishments, and these deserve to be recognized and celebrated. However, this document cannot adequately reflect the full range of what everybody at Transport Canada does throughout the year. There are always unpredictable challenges. I am very proud to be Minister of Transport, and to work with many dedicated people throughout Transport Canada.

Thanks to everybody in this department, Canadians can be proud of our achievements, as we strive to ensure our country's transportation systems are safe, secure, green, and efficient, supporting Canadians and our economy.

The Honourable Marc Garneau, P.C., M.P.

Minister of Transport



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## Results at a glance and operating context

For more information on Transport Canada's plans, priorities and results, see the "[Results: What we achieved](#)" section of this report.

### Priority 1: Improve the performance and reliability of Canada's transportation system to get products to market and grow our economy

[Transportation 2030](#)<sup>ii</sup> Theme Linked to this Priority: Trade Corridors to Global Markets

#### For this priority, we:

- Focused on federal transportation infrastructure initiatives, including:
  - the National Trade Corridors Fund
  - the Trade and Transportation Information System
  - ongoing development of the Transportation Data and Information Hub
  - and supply chain visibility projects
- Delivered investments under the \$2.3 billion in the [National Trade Corridors Fund](#)<sup>iii</sup> in 2019-20 by:
  - completing the Northern call for proposals and committing \$234 million in federal funding to 11 projects
    - These projects represent a total investment of \$328 million in the North across all modes of transportation
  - advancing the continuous call for proposals trade diversification projects and committing over \$705 million in federal funding to 35 projects
    - These projects represent a total investment of \$1.6 billion across all modes of transportation
    - For these two calls for proposals, we used creative approaches including:
      - collaborating with and offering feedback to Northern applicants
      - integrating a climate resilience assessment in the application guide
      - launching an online application to automate the intake process for proposals

- committing around \$1.75 billion of the \$2.3 billion National Trade Corridors Fund since 2018 as a result of the three calls for project proposals
- Completed a public engagement process and continued the analytical work on the Ports Modernization Review with a view to optimizing their current and future role in the transportation system as innovative assets that support inclusive growth and trade.
- Worked on legislative changes to improve access, transparency, efficiency and long-term investment in the Canadian freight rail system by launching public consultations and continuing to develop a regulatory proposal to refine freight rail data reporting.
- A multimodal strategy was developed to address the labour shortages in the transportation sector, with an initial focus on increasing the representation of women and Indigenous Peoples in the aviation sector. This was achieved through collaboration with other federal departments on specific programs, regulatory modernization, public promotion and outreach, as well as analysis, data and research.

## **Priority 2: Provide greater choice, better service, lower costs and enhanced rights for consumers.**

### **Transportation 2030 Theme Linked to this Priority: Trade Corridors to Global Markets**

#### **For this priority, we:**

- Put in place the [\*Air Passenger Protection Regulations\*<sup>iv</sup>](#) to better protect consumers when they travel by air, and be clearer and more consistent regarding passenger rights and air carriers' obligations.
- Implemented new legislative provisions and regulations that allow the Minister to consider and decide on applications for joint ventures voluntarily submitted by air carriers on a cost-recoverable basis.
- Collaborated with the World Economic Forum and project partners to develop prototype components for the Known Traveller Digital Identity concept. These prototypes utilise the pilot's distributed ledger technology and mobile app.
- Worked on VIA Rail's High Frequency Rail project by:
  - helping establish the Joint Project Office between VIA Rail and the Canada Infrastructure Bank
  - researching alternative rail technologies and models
  - conducting international comparisons for the effective and efficient delivery of passenger rail systems, and

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- looking to see how interested potential partners may be in the creation of High Frequency Rail. This exercise showed that the private sector is extremely interested in investing
  - Monitored and enforced the recently approved merger of First Air and Canadian North to make sure that:
    - air travel in the North is fair safe, affordable, and reliable
      - This is key as northern and remote communities rely on air service to bring them food, medical supplies, and other essential goods and services
    - capacity is maintained and improved as needed
    - Northern travellers receive a high level of service
  - Supported the Minister of Employment, Workforce Development and Disability Inclusion in advancing Bill C-81, [An Act to Ensure a Barrier-Free Canada<sup>v</sup>](#) (*Accessible Canada Act*), which received Royal Assent on June 21, 2019 by:
    - Amending the [Canada Transportation Act<sup>vi</sup>](#) to protect the human rights of persons with disabilities, and
    - working collaboratively with partners to promote global accessibility in aviation via the [International Civil Aviation Organization<sup>vii</sup>](#)
  - Supported the Canadian Transportation Agency's Regulatory Modernization Initiative by working together to finalize the [Accessible Transportation for Persons with Disabilities Regulations<sup>viii</sup>](#).

### **Priority 3: Build world-leading marine corridors that are competitive, safe and environmentally sustainable, and enhance Northern transportation infrastructure, while respecting commitments to Indigenous communities**

**[Transportation 2030](#) Theme Linked to this Priority:** Waterways, Coasts and the North

#### **For this priority, we have:**

- Continued to develop and put in place measures to protect whales from the negative effects of vessel traffic on Canada's coasts by:
  - buying a Dash 8 aircraft for the National Aerial Surveillance Program fleet for detection and deterrence of oil spills and whale monitoring

- The Program has 3 Dash 8 aircraft
  - putting in place measures like:
    - mandatory vessel slowdowns to reduce the risk of vessel strikes with North Atlantic right whales
    - a Ministerial Interim Order which prohibited vessels from being within 400m of Southern Resident killer whales, and
    - set 3 interim sanctuary zones for the Southern Resident killer whales that vessels can't enter
  - taking monitoring and enforcement actions on vessels exceeding speed limits in the speed reduction zones and increasing our surveillance through the National Aerial Surveillance Program
  - signing a 5-year Conservation Agreement with the Vancouver Fraser Port Authority and industry partners to commit to the continuation of the Enhancing Cetacean Habitat and Observation (ECHO) program that will support the recovery of endangered Southern Resident killer whales
  - signing a 4-year grant agreement with the [Ocean Wise Conservation Association](#)<sup>ix</sup> to expand the Whale Report Alert System that broadcasts whale sightings in real-time to reduce the risk of large commercial vessels disturbing or striking whales
  - developing algorithms to detect whales in imagery from Transport Canada's Remotely Piloted Aircraft System (drone) program in the Gulf of St. Lawrence, which will help set speed restrictions to manage the risks of whale strikes and deaths
- Worked on the [Oceans Protection Plan](#)<sup>x</sup> to improve marine safety and environmental protection by:
    - working with Indigenous people and the public, to protect our coasts and waterways for future generations, while growing the economy
    - working to preserve and restore coastal marine ecosystems that are vulnerable to marine shipping
      - This includes protecting Canada's whale populations, removing abandoned boats, and restoring coastal ecosystems
    - in July 2019, the [Wrecked, Abandoned or Hazardous Vessels Act](#)<sup>xi</sup> was brought into force, and under the act we have cleaned up over 130 vessels

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- Completed an independent review of the [Pilotage Act<sup>xii</sup>](#) and introduced legislative updates to the Act. The Act, which governs marine pilotage in Canada, received Royal Assent on June 21, 2019. The updated Act will support Canada's excellent pilotage safety record and provide a stronger pilotage system, with increased national consistency, and greater efficiency and transparency.
  - Engaged with our provincial counterparts and representatives from the fishing sector, to reduce risk and begin to change the fishing industry's culture by:
    - teaching mariners and recreational boaters about regulatory requirements through more oversight inspections and increasing our ability to educate recreational boaters
    - developing a Fishing Vessel Safety Strategy to protect the lives of Canadian fish harvesters by improving safety culture within the fishing industry. The Strategy uses a three pillar approach:
      - improving oversight
      - increasing support for education and awareness projects, and
      - creating regional engagement structures to expand consultation and share safety best practices
  - Engaged with Indigenous peoples on joint priorities under various programs (like the Navigation Protection Program), and participated in discussions led by other federal departments, including Crown-Indigenous Relations Canada, Indigenous Services Canada, and Natural Resources Canada.
  - Worked to put in place the [Arctic and Northern Policy Framework \(ANPF\)<sup>xiii</sup>](#) which set out ways to improve socio-economic opportunities for Northerners.
  - Launched an Arctic Transportation Policy Framework (ATPF) for the department that will help strengthen northern transportation system in collaboration with territorial partners. The ATPF contributes to developing strategies that support Transportation Infrastructure in the North, including strategies to advance the construction of hangar and accommodation facilities for the National Aerial Surveillance Program (NASP) in Iqaluit. Highlights of the achievements include:
    - acquiring the land leases for the hangar and accommodations
    - making progress on designing, tendering and building the facilities

#### **Priority 4: Build a safer and more secure transportation system that Canadians trust.**

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**Transportation 2030 Theme Linked to this Priority: Safer Transportation**

**For this priority, we have:**

- Developed rules and regulations to reinforce railway safety in the areas of fatigue management, passenger equipment, track safety, and railway employee qualifications and training.
- Worked on our response to recommendations from the statutory review of the *Railway Safety Act* by:
  - collaborating with other levels of government to address ongoing rail safety issues, like trespassing, grade crossings and land-use planning
  - updating existing provincial rail safety inspection service agreements to make sure greater rail safety regimes are clear and consistent
  - examined proposed changes to legislation as part of a legislative proposal in response to the report's recommendations.
- Developed, in collaboration with Canadian marine security partners, a concept of operations document that will help identify opportunities to improve collaboration between marine security partners, improve governance with better awareness of shared operational challenges, and confirm strategic direction.
- We are exploring opportunities to increase inspectors north of the 60th parallel, including ongoing recruiting efforts which are aligned with potential options to open a Transport Canada Centre in Iqaluit.
- Addressed the threat of invasive species by continuing work to give effect to the International Maritime Organization's International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004. Proposed regulations were published in June 2019 in the *Canada Gazette*, Part I.
  - Comments received from that process are being considered as we move towards publishing the final regulations in the *Canada Gazette*, Part II
- Completed the Aviation Security Review which found ways to improve Canada's aviation security system, guided by four fundamental principles: confidence, innovation, collaboration and excellence.
- Continued to put in place changes to the [Motor Vehicle Safety Act](#).<sup>xiv</sup>
- Worked on developing a whole of government approach and guiding principles on automated/connected vehicles by:
  - Leading the Vehicle of the Future Advisory Group with Innovation, Science and Economic Development Canada. The group is made up of members from government, industry, academia and non-governmental organizations. It

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- looked at safety and security issues, innovation and competitiveness, data privacy, digital and physical infrastructure, and social impacts and risks
- Co-chairing a Federal-Provincial-Territorial Coordinating Council on automated and connected vehicles with the Ontario Ministry of Transportation
    - The council supports coordination between the federal, provincial, and territorial transportation and road safety ministries as they develop safety and testing guidelines, and share information on testing and pilot projects

## **Priority 5: Reduce environmental impacts and embrace new technologies to improve Canadians' lives.**

**Transportation 2030 Theme Linked to this Priority:** Green and Innovative Transportation

### **For this priority, we:**

- Participated in the Canada Energy Regulator's (formerly the National Energy Board) Reconsideration of the [Trans Mountain Expansion Project](#).<sup>xv</sup> We also participated in the Crown's consultation, which resulted in measures to accommodate the concerns of Indigenous groups, and informed the Governor in Council's decision-making for the project.
- Work began in response to the [Canada Energy Regulator's Report on the Reconsideration of the Trans Mountain Pipeline expansion](#)<sup>xvi</sup> recommendation #15 (assess a possible expansion of the scope of losses covered under Canada's liability and compensation regime for ship-source oil spills). The first phase launched in late 2019, and focused on stakeholder engagement and research on non-monetary losses that could result from ship-source oil spills.
- Continued to put in place new measures to reduce greenhouse gas emissions from domestic and international transportation. We also supported the government's priorities under the Pan-Canadian Framework on Clean Growth and Climate Change by:
  - working under the Federal-Provincial-Territorial Task Force on after-market fuel saving technology for heavy duty vehicles
  - launching the Incentive for Zero-Emission Vehicles Program, to make these vehicles more affordable for Canadians, and joining the International Zero-Emission Vehicle Alliance



- starting the monitoring, reporting and verification phase of the International Civil Aviation Organization’s Carbon Offsetting and Reduction Scheme for International Aviation in Canada
- supporting projects to research, develop and test clean technology for Canada’s transportation system, including:
  - launching a \$4.7M call for proposals to develop clean technology solutions for the marine sector
  - developing Canada’s first regulatory sandbox to evaluate the safety and environmental performance of automated (cooperative) truck platooning
  - working on 9 clean-rail research projects on biofuels, electrification, efficiency, and emerging technologies, like hyperloop
  - supporting a national scan to identify the most promising clean rail technologies for Canada
- Supporting 22 projects on clean solutions for on-road sector, including connected and automated vehicles, zero emission heavy-duty trucks, and hydrogen fuel cell vehicles
- Developed artificial intelligence algorithms to improve whale detection and possibly reduce greenhouse gas emissions by optimizing aviation safety inspection planning (reducing car/air travel).
- Ran extensive human factor and vehicle performance tests to evaluate the safety of new vehicle technologies, including automated shuttles and advanced driver assistance systems for passenger cars.
  - The results of this testing have been presented at technical conferences and to road safety stakeholders
- Published regulations for small remotely piloted aircraft systems (drones) operated within visual line-of-sight ([Canadian Aviation Regulations Part IX](#)).<sup>xvii</sup>
- Supported projects with Canada’s remotely piloted aircraft system (drone) industry to validate drone technologies, and spur innovation and collaboration to collect safety data to inform the next phase of developing drone regulations.
- Submitted a proposal to the international community to start working on a review of international guidelines and to further the adoption of measures and technologies to reduce underwater noise from vessels.
- Launched the [Quiet Vessel Initiative](#)<sup>xviii</sup> to research, develop and demonstrate emerging technologies and vessel designs to reduce underwater noise from vessels.



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Information is being given to vessel owners, operators, and designers to reduce the impact of shipping on marine mammals and the marine environment.

- Supported the Government of Canada’s national strategy of zero plastic waste through domestic and international projects.
- Through the “MyVirtual Team” project, we supported remote work, reduced greenhouse gas emissions from commuting.
  - This also allowed Transport Canada to have more than 90% of employees work from home when the COVID-19 pandemic began in March 2020
- Reduced print volumes by more than 20% year-over-year through print and paper management and transitioning to digital processes.
- Reduced e-waste from digital devices by participating in programs like Computers for School+.

## **Priority 6: Transform the design and delivery of programs and services to Canadians in order to adapt to a changing world.**

**Transportation 2030 Theme Linked to this Priority:** Transport Canada’s Operations and Service Delivery

### **For this priority, we:**

- Improved online service and increased the number of digital services available by:
  - creating a Transformation Directorate to implement digital modernization initiatives including building digital solutions to improve quality of services, streamline business processes, increase automation, leverage authentic sources of data and align with the Government of Canada’s digital and service transformation agenda
  - launching a digital solution for an end-to-end service request process that enables cost recovery activities and requirements for Marine Cargo and Marine Insurance business lines
  - transitioning the Marine Medical Program and some medical examiners transitioned to use electronic marine examination reports
  - launching the myTC Account platform to deliver services online
  - developing a digital tool called Corporate Data Pathfinder for integrated corporate planning

- Developed an Emerging Technology Lab to research and identify key trends in emerging technology and find uses for the technology in our programs and services.
  - The lab developed a repeatable, user centered testing method to speed-up proofs of concept for emerging and disruptive technology
- Ran workshops for staff to learn about a variety of disruptive and emerging technologies. The workshops allowed them to explore possible use cases.
  - A list of use cases was created and prioritized which will lead to experiments planned for 2020-21
- Explored new disruptive technologies (such as Artificial Intelligence, blockchain, machine learning and robotics), including:
  - completing proofs of concept and experiments on using AI for cargo screening (Pre-Load Air Cargo Targeting Pilot) and robotic process automation to support financial reporting and transactions
  - launching a pilot for voice-enabled motor vehicle recalls (Vehicle Recalls Canada Alexa Skills Pilot), and working on the Known Traveller Digital Identity pilot project
  - developing broader artificial intelligence abilities to give business units data-driven solutions to help them make evidence-based decisions on risk and performance
- Modernized fees by putting in place the [Service Fees Act](#)<sup>xix</sup> requirements and managing fees digitally. We also worked on:
  - completing the first inventory of services to capture information on attributes and data on Transport Canada’s services and find ways to improve the quality of services
  - implementing requirements under the [Service Fees Act](#) and updating or introducing new fees for services
  - modernizing fees for eight business lines:
    - New/updated fees were approved for marine cargo/port state control and Marine Insurance Unit services
    - Developed fee proposals for domestic vessel regulatory oversight, Marine Technical Review Board, marine personnel, pleasure craft licensing, pleasure craft operator competency and vessel registry
    - Developed and launched a strategy to bring new and updated marine cargo and marine insurance fees into force
- Modernized the way we oversee the transportation sector by:

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- completing user-research on the use of new technologies for inspectors and improving the efficiency and effectiveness of our oversight
  - developing a new strategy to modernize tools and systems used by inspectors, managers and program officers to plan, oversee and report on activities
  - creating a framework to assess and compare oversight programs to understand common and unique parts of each
  - launching and staffing a new program to coordinate our oversight programs' digital portfolio
  - starting to plan and design multiple projects that will modernize legacy oversight solutions, and
  - giving Transport Canada's inspectors modern digital tools, including tablets, smartphones, and virtual reality devices
- Supported innovation by:
    - launching a \$21.1 million call for proposals to support projects that research, develop and demonstrate clean and quiet solutions for Canada's marine sector
    - creating the Rail Automation of Inspection Technologies Program in collaboration with industry, academia and research organizations
    - managing 22 active projects to test the safety and environmental performance of emerging technologies for road vehicles
    - improving our ability to anticipate changes in technology
    - sharing expertise in technology and research
    - identifying innovative technologies that support regulatory solutions
    - created a collaborative Automated Inspection Technologies Research, Development and Deployment (RD&D) plan through the Railway Research Advisory Board. The plan will help industry automate the inspection processes, and support data sharing so that an equal, or greater, level of safety can be shown as a reason to modernize regulations
  - Through our on-going aviation RD&D program, in collaboration with the US' [Federal Aviation Administration](#),<sup>xx</sup> assessed the performance of aviation de-icing fluids. This period we began:
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- testing a vertical tail inside the wind tunnel to see how efficient anti-icing fluids are on vertical surfaces and the impact wintery contaminants have on aerodynamics
- working on an artificial snow making machine that will eventually be able to simulate real-world conditions. This will help us test fluids in labs
- Developed a data strategy that focuses on improving:
  - transparency and public trust
  - open and accessible transportation data
  - evidence-based decision making
  - targeting of public risk
  - reporting on results and service delivery
- Appointed a Chief Data Officer at the senior executive level to make sure all data-related projects are aligned and created governance to support our efforts.
- Established a Data Science Centre of Excellence to build the data analysis skills we'll need for upcoming projects.
  - TC launched its Corporate Data Pathfinder project which will enable better measurement and reporting of its corporate functions.
- Capital investments are underway to put in place a business intelligence and data analytics ecosystem by May 2023 and a geospatial system by May 2021.
  - While still being developed, these new systems are already being used to inform COVID-19 decision-making in TC's National Emergency Coordination Center
- Dealt with barriers to creating a responsive, coherent, and agile program and to the delivery of service, as well as barriers to innovation and data-sharing by updating legislation and regulations, and designing policies by:
  - meeting timelines to improve regulatory agility and reduce regulatory barriers to innovation as outlined in [the 2019 Transportation Sector Roadmap<sup>xxi</sup>](#)
    - Some projects are already completed, such as the modernization of the [Canadian Transportation Agency Regulations<sup>xxii</sup>](#) and Visual Line of Sight for small drones amendments in the [Canadian Aviation Regulations<sup>xxiii</sup>](#), while others will be completed in the next year.
  - changing the [Canada Transportation Act<sup>xxiv</sup>](#) to allow any Act or regulation that Transport Canada oversees to be administered, enforced and exempted electronically
    - This will remove barriers to digital service delivery and support innovation through research, development or testing

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## Results: what we achieved

### Core responsibility 1 – Safe and Secure Transportation System

#### Description

The programs within this core responsibility make sure that Canada's transportation system is safe and secure. They do this by enacting, updating and enforcing all laws, regulations, policies and oversight activities (like inspections) related to the safety and security of the transportation system.

#### Results

We achieved many results throughout the 2019-20 fiscal year in support of this core responsibility, the [Minister's mandate letter](#),<sup>xxv</sup> as well Transport Canada and [government-wide priorities](#).<sup>xxvi</sup> Our results are broken down as follows:

- Completed year three of Incident Management modernization with more than 1,300 people trained in the internationally recognized Incident Command System and related Emergency Operations Centre training.
- Transport Canada's Situation Centre (SITCEN) provided a 24/7 reporting hub for stakeholders and coordinated TC's emergency response function, helping timely information sharing for safety and security issues with key partners.
- Expanded Transport Canada's Operations Management System's abilities by:
  - adding a digital emergency personnel management and surge capacity tool
  - adding geospatial mapping tools for situational awareness and risk analysis
  - preparing to migrate the system to the cloud which will improve security and system availability
  - holding orientation and training sessions
- Assessed national and international threats against transportation to support security mitigation measures and provide situational awareness to TC's senior decision makers.
- Supported senior management and the Minister on the application of the [Investment Canada Act](#)<sup>xxvii</sup> by preparing in-depth analytical reports and providing timely advice.

- Finished developing the [Transportation of Dangerous Goods by Rail Security Regulations](#)<sup>xxviii</sup> which were published in *Canada Gazette*, Part II in May 2019.
- Developed and launched the rail carrier oversight program for the new [Transportation of Dangerous Goods by Rail Security Regulations](#).<sup>xxix</sup> The program was developed to oversee railway sites and facilities owned and/or operated by railway carriers that handle or transport dangerous goods. The program prioritizes sites based on relative risk levels.
- Supported safety-related rail improvement, and public education and awareness by funding 140 projects for a total of \$17.4 million:
  - 28 grade crossing closures
  - 104 grade crossing improvement/infrastructure projects
  - 4 research projects, and
  - 4 education and awareness projects
- Evaluated the Rail Safety Improvement Program in April 2020, which led to 3 recommendations to improve the efficiency and effectiveness of the program.
- Worked on strategies to restore navigation protections and incorporate modern safeguards by:
  - adding 25 navigable waters to the [Canadian Navigable Waters Act's](#)<sup>xxx</sup> schedule, so that any works in those waterways that may interfere with navigation can receive extra oversight
  - launching a public registry of works on navigable waters, so that Canadians can have a say in projects that could affect their right to navigate
  - publishing the [Major Works Order](#)<sup>xxxi</sup> to designate the types of projects that require approval due to their high likelihood of substantially interfering with navigation
  - exploring new partnerships with Indigenous groups
- Finalized the Aviation Security Report which presents eight strategic recommendations to build a sustainable, long-term approach to future-proof the aviation security system against both new and traditional safety and security risks.
- Worked with partners to develop the [Known Traveller Digital Identity](#)<sup>xxxii</sup> mobile app. This includes the service design and user experience. By working with TC Digital Services, an internal enrollment platform was built to support the pilot project in Canada.

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- Completed the development of regulations for cargo-only screening and the Explosives Detection Dog Handler Teams Program. However, launching the program has been affected by the COVID-19 pandemic.
  - Addressed emerging challenges within the cargo sector by putting in place protocols and managing regulatory instruments. Work in this area will continue as new challenges come up.
  - Made progress on our aviation safety regulatory framework by:
    - working with the aviation industry through meetings and joint working groups, and using social media and the web to consult publicly and foster open and continuous dialogue with the aviation community
    - completing three regulatory packages that affect parts of the *Canadian Aviation Regulations*. Seven more are under development
      - We continue to work on regulatory packages that will allow for novel regulatory approaches. Feedback from members of the aviation community confirm that the results achieved to date have had a large and positive impact on their day-to-day operations
  - Focused on remotely piloted aircraft systems (RPAS or drones) by:
    - publishing regulations for small drones operated within visual line-of-sight ([Canadian Aviation Regulations Part IX](#))<sup>xxxiii</sup> including launching an inspector training and oversight program, an online service portal, a drone site selection tool, a safety awareness campaign and public facing guidance for stakeholders
    - planning and launching two of the most complex beyond visual line of sight drone ability assessments in Canada, in cooperation with our RPAS Task Force, a functional group in TC responsible for regulatory development, policy, licensing and registration of drones in Canada.
    - commissioning the survey of the Inuvik to Tuktoyaktuk Highway, the Dempster Highway and an offshore beluga whale survey for [Fisheries and Oceans Canada](#)<sup>xxxiv</sup> and the [Government of Northwest Territories](#).<sup>xxxv</sup>
    - helping develop drone technology that will help monitor and protect Canada's waterways during the North Atlantic right whale season in the Gulf of St. Lawrence by using drones from our RPAS Project
    - developing a camera system employing Artificial Intelligence software that will allow RPAS to contribute to North Atlantic right whale management activities
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- using the Specific Operational Risk Assessment tool for the first time on a complex beyond visual line of sight mission in Canada. This exercise led to the development of an updated operational risk assessment tool specific to the Canadian environment that is now used by our regulatory authorities
- Supported projects with Canada's drone industry to validate drone technologies, and spur innovation and collaboration to collect safety data to inform the next phase of drone regulations by:
  - adapting Joint Authority on Rulemaking for Unmanned Systems (JARUS) SORA tool to account for Canada's operating environment
  - issuing Special Flight Operations Certificates for lower-risk beyond visual line of sight operations
  - launching the new RPAS (drone) Operational Test, Evaluation and Review project, which has received funding from TC's Experimental Fund
  - leading an Innovation Challenge in collaboration with Public Service Procurement Canada (PSPC) to identify and test Canadian-operated RPAS for North Atlantic right whale surveillance for 2021.
  - Collaborated and engaged with key stakeholders including:
    - participating in various international standards setting bodies and electing Canada as Vice-Chair of the Joint Authority on Rulemaking for Unmanned Systems (JARUS)
    - working with the National Research Council, universities and industry on R&D projects for detect and avoid technologies, communication links (C2), icing and risk modeling
- Improved our ability to meet industry service demands through the Enhanced Aircraft Certification Initiative, whose improvements helped support the economic competitiveness of Canada's aerospace sector, while ensuring the highest levels of safety are maintained by:
  - dedicating significant effort and resources to the Boeing 737 MAX 8 investigation. The team has been working with aviation safety agencies toward the MAX's return to service
  - participating more in other international forums, supporting 63 different international committees/meetings, with a focus on making progress on aircraft design standards and related advisory material
  - designing new regulatory fees and better using technology to support the delivery of aeronautical product approvals



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- The COVID-19 pandemic has created an unprecedented global crisis that's having a major impact on all parts of the Canadian air industry, travellers, and the economy. While much of our work continued remotely, some activities were postponed due to COVID-19 and in some cases, we don't know when they'll resume.
  - Modernized Marine Safety and Security's regulatory and oversight frameworks by:
    - amending the Navigation Safety Regulations by consolidating ten existing navigation safety and radio-communications regulations into one comprehensive regulation. The regulations were published in the Canada Gazette I on June 15, 2019. Transport Canada led online consultations through the Let's Talk Transportation website from April 29 to July 31, 2020 to inform marine stakeholders that the coming into force of the AIS carriage requirements will be changed from one year after the Regulations are registered to six months after to align with the spring 2021 initial target date for the coming into force of these requirements.
    - working with stakeholders and international partners to reduce marine security risks and achieve greater maritime domain awareness. A workshop and table top exercise was conducted under the Five Nations Strategic Arrangement in December 2019. The department also continues to lead efforts to enhance awareness of security and cyber-security risks through international collaboration offered under the CANUS Maritime Domain Awareness Partnership. Transport Canada continues to reduce gaps in the Government of Canada's ability to detect vessels of unknown intent in both international and inland waterways by working with US counterparts via forums such as the Great Lakes information sharing working group.
    - amending the Marine Personnel Regulations by introducing new Certificates of Competencies, Certificates of Proficiencies, training, and familiarization requirements to align with international requirements. Drafting of all 4 Parts of the Marine Personnel Regulations (Certification, Medical, Crewing and Maritime Labour Standards) is proceeding well but advancement is being affected by COVID-19 priorities.
    - The goal of the Vessel Construction and Equipment Regulations (VCER) is to develop a single regulation that will result in a simplified regulatory framework for the construction of new vessels 24 metres in length or greater, while ensuring Canadian requirements for the construction of, and equipment for, these vessels are consistent with international requirements, modern standards and industry best practices. Transport Canada has begun drafting the regulations in January 2020. The proposed VCER regulations are expected to be published in the Canada Gazette Part I in Winter 2021.

- The proposed regulatory changes would expand Safety Management System (SMS) requirements to certain domestic vessels using a tiered structure, with more stringent SMS and oversight model in place for larger/high risk vessels. A communication campaign with targeted and impacted stakeholders was launched in early August. Drafting of the regulations is expected to start in Fall 2020.”
- In 2015, Transport Canada started a three-phased approach to improve fishing vessel safety through updates to existing Regulations. The first phase of this modernization, the Fishing Vessel Safety Regulations came into force in 2017, updating safety equipment and vessel stability requirements while also introducing additional safe operating procedures for small fishing vessels. Phase II will update the design and construction requirements for small fishing vessels (not more than 24.4 metres in length and 150 gross tonnage) that are constructed, manufactured or rebuilt in, or imported into, Canada.
  - The intent and application of the proposed Phase II Regulation has been presented to major fishing industry stakeholder groups. The fishing industry has provided detailed feedback, while seeking more time to review and comment and requesting to have a longer working session. As plans to host an in-person meeting to provide a final walkthrough of the proposed Regulations, as promised to the industry, have been delayed due to COVID-19 restrictions, the target publication date for Canada Gazette Part I was moved to September 2021.
- working together with our partners to reduce marine security risks on vessels and marine facilities and ports, and achieve greater maritime domain awareness. These efforts contribute to the security, safety, and prosperity of Canadians and of our allies.
- continued to inspect all foreign tankers on their first visit to Canada and at least once a year afterward to ensure that tankers comply with Canadian and International laws and regulations, and are in safe operating condition.
- Acted on the [Railway Safety Act Review Panel Report](#)'s<sup>xxxvi</sup> recommendations by:
  - working with other levels of government to address persistent rail safety issues, like trespassing, grade crossing, and land-use planning
  - updating provincial rail safety inspection services agreements to make sure there that rail safety regimes are clear and consistent across the country
  - looking at proposed legislative changes as part of our response to the report's recommendations

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- Published the proposed [Locomotive Voice and Video Recorder Regulations in the Canada Gazette, Part I<sup>xxxvii</sup>](#) in May 2019, and followed by a sixty-day comment period which ended in July 2019. We are now reviewing comments with the goal of publishing the final regulations in 2020.
  - Developed rules and regulations to reinforce railway safety in the areas of fatigue management, passenger equipment, track safety, and railway employee qualifications and training.
  - Worked on fatigue management in the rail industry by:
    - working with the [Railway Association of Canada<sup>xxxviii</sup>](#) and railway companies to update hours of work and rest for railway operating employees in order to make sure that they align with fatigue science and current best practices
    - developing draft regulations for a fatigue risk management system, which will allow Canadian railway companies to use a tailored, risk-based approach to fatigue management taking into account time awake, rest and sleep opportunities, and other influences that impact fatigue and alertness
    - considering the results from a study on the state of readiness of the rail industry in Canada to implement a Fatigue Risk Management System and a study on the impact of fatigue on safety critical positions in the rail industry, as we continue working with the Canadian railway industry to develop robust and modern prescriptive requirements and systems-based approaches to the management of fatigue
  - Review of Passenger Equipment Rules completed and found that no changes are needed at this time
  - Focused on rules that respect track safety by:
    - identifying maintenance and inspection practices that need to change, and
    - developing requirements for trains that operate above class 5 track speeds
  - Worked on employee qualifications and training for railways employees to look at existing regulations around training and qualification requirements for positions that are critical for safe railway operations.
  - Improved our data analysis abilities, provided decision makers with more timely and accurate information to maximize the impact of their industry oversight activities and optimized spending.
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- Developed regulatory proposals for the [\*Transportation of Dangerous Goods Regulations\*](#),<sup>xxxix</sup> including:
  - updating the requirement related to handling, offering for transport, and transporting dangerous goods to reflect the most current practices and technology
  - harmonizing the regulations with the most recent editions of international codes
  - maintaining effective and meaningful engagement practices with stakeholders
- Worked with domestic and international partners to develop and improve requirements for safely transporting dangerous goods, including:
  - publishing research results on the hazard, flammability and behavior properties of crude oil
  - assessing lithium battery packaging for transportation as air cargo
  - evaluating means of containment under non-ideal conditions
  - monitoring the use of liquefied natural gas as an alternative fuel
  - choosing new research projects, every year, based on emerging trends and program needs
- Developed and maintained safety standards for means of containment like tank cars, highway tanks, intermediate bulk containers and cylinders.
  - These safety standards make sure that dangerous goods are kept in a safe means of containment that's designed to prevent the release of dangerous goods that endanger life, health, property or the environment while being transported normally
- Modernized the oversight of transporting dangerous goods by:
  - creating strategies for key oversight activities, like compliance inspections, supply chain analysis prioritization framework and collaboration with provinces/territories and US counterparts to identify movements of dangerous goods in Canada and across the Canada-US border;
  - developing a thorough monitoring system that improves compliance rates
- Oversaw the transport of dangerous goods through:
  - almost 100 inspectors making 5,210 inspections this year. These inspections led to 204 enforcement actions and risk reduction measures

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- updating, developing and delivering specialized training for inspectors to meet the program's needs
  - improving our oversight by identifying, researching, and dealing with emerging risks
  - Increased the consistency, quality, efficiency and effectiveness of transportation of dangerous goods enforcement activities by developing a framework for a database that uses data to support site inspections and means of containment.
  - Developed, in collaboration with the US and international partners, the 2020 Emergency Response Guidebook, to support first responders in incidents involving dangerous goods. The 2020 guidebook should be published in fiscal year 2020-21.
  - Completed a flammable liquid curriculum called [The Canadian Emergency Response to Flammable Liquid Incidents in Transport](#).<sup>xi</sup> The curriculum is bilingual and designed to support community planning and response following a flammable liquid incident by road or rail. First responders and emergency planners have begun completing the first level of the curriculum.
  - As part of the [2019 Regulatory Modernization Bill](#),<sup>xii</sup> we put forward changes to the *Canada Transportation Act* to allow any Act or regulation that Transport Canada oversees to be administered and enforced electronically. Doing this removed barriers to digital service delivery.
  - As part of the same Bill, the *Canada Transportation Act* was changed to allow for exemptions from requirements in any Act or regulation that Transport Canada oversees. This change has helped us promote innovation through research, development and testing in the transportation sector.
  - Drafted proposed amendments focused on modernizing key parts of our regime, like compliance and enforcement authorities, and authorities to support service delivery, regulatory flexibility, and improving our response capability.
  - Developed an integrated policy suite to give consistent, cross-modal directions and guidance to our Safety and Security Group about ministerial authorities, risk management, policy development, program design/delivery and performance assessment.
  - Put in place a focused, multimodal departmental regulatory planning and prioritization approach based on departmental policy drivers (for example: mandate letter, safety and security goals, Transportation Safety Board recommendations, regulatory reviews).

- Completed phase two of the Oversight Transparency Initiative which included publishing the Integrated National Oversight Plan and summarizing the safety management system results for rail, marine and aviation.
- Improved our public risk decision-making tools to support the creation of oversight and regulatory approaches.
- Delivered several courses through our Multimodal Integrated Technical Training Group. These courses supported consistent program delivery across modes, like delegated authorities, oversight/enforcement fundamentals, occupational health and safety.
- Launched the Regional Enforcement Units in April 2019 which, with the Centre of Enforcement Expertise, will support the department in our delivery of consistent enforcement activities through enforcement investigators. This includes training and issuing designation/delegation for all enforcement investigators and the creation of a standardized approach to reporting of enforcement actions across transportation modes.
- Worked on making legislative changes to the [Motor Vehicle Safety Act](#) by:
  - preparing material and policies to consult stakeholders and develop regulatory changes
  - evaluating stakeholder requests for safety standards exemptions
  - testing IT concepts to mine car data to identify potential defects that should be investigated
- Published [The School Bus Safety Report<sup>xlii</sup>](#) on the Council of Ministers for Transportation and Highway's website. The report recommends the pursuit of a series of measures to strengthen school bus safety, including: extended stop arms and infraction cameras; 360-degree cameras; and automatic emergency braking. Projects are now underway to assess these safety features to support a regulatory package.
- In June 2019, we published changes to the [Commercial Vehicle Drivers Hours of Service Regulations<sup>xliii</sup>](#) to require the use of electronic logging devices by federally-regulated bus and truck motor carriers and their drivers. Electronic logging devices become mandatory on June 12, 2021.
- Developed a minimum standard for entry-level training for Class 1 (tractor-trailer) commercial drivers. The standard was approved by the Council of Ministers and should be used by the provinces and territories by 2021.

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- Addressed impaired and distracted driving through a range of projects, including:
    - working with Public Safety Canada to providing data for public awareness campaigns on drug-impaired driving and monitored the impact of cannabis on road safety
    - working with the Canadian Council of Motor Transportation Administrators to review the latest version of the [Alcohol and Drug Crash Problem in Canada](#)<sup>xliv</sup>
    - partnering with Canadian Council of Motor Transportation Administrators and jurisdictions to conduct roadside alcohol and drug testing and provided funding through the [Enhanced Road Safety Transfer Payment Program](#)<sup>xlv</sup>
  - Published [Canada's Vehicle Cyber Security Guidance](#)<sup>xlvi</sup> in May 2020. We're also working with the US Department of Transportation's Volpe Centre to develop a Vehicle Cyber Assessment Framework and companion tool, and a Road Cyber Program Plan for Transport Canada. These should be completed in 2021.
  - Worked on a revised modernized version of [Canada's Safety Framework for Connected and Automated Vehicles](#),<sup>xlvii</sup> with the goal of publishing it in December 2020.
  - We have worked with manufacturers including Tesla and Toyota to establish data retrieval protocols to support collision investigations.

### Gender-based analysis plus

Our programs in core responsibility 1, "A Safe and Secure Transportation System", have identified a number of Gender-based analysis plus (GBA+) projects and issues they are either currently working on or have been completed in the past fiscal year, most notably:

- Considering a GBA+ analysis when delivering regulatory support services in the Safety and Security Group. Promoting gender equality, diversity and inclusiveness when working with the international community to develop aviation security rules and laws
- A GBA+ analysis is being supported and done for all Treasury Board submissions, including regulatory proposals
- The Aviation Security Program continued to work on the development of tools to help promote gender equality, diversity and inclusiveness in its work with the international community when creating international aviation security rules and laws
- Continued to strengthen the regulatory framework of programs, including the safe integration of drones into Canadian airspace, by assessing the impact that proposed



regulations could have on Canadians from identifiable groups including by gender, age, geographic location, and Indigenous peoples

- Continued to use gender-neutral terms in legislation and programming, such as drones, and promoting gender-neutral terminology internationally (like revising the term “Unmanned Aerial Vehicles”)
- Developed a resolution to the International Maritime Organization to continue promoting a barrier-free working environment for women in the maritime sector
- Led the development of a proposal to the International Maritime Organization to support collecting data on women’s participation in the maritime sector to develop sound policies to increase gender equality in the sector.
- Co-founded the International Maritime Organization (IMO) Gender Equality Network, which encourages IMO delegates to work in a coordinated manner to share information, ideas and best practices aimed at achieving gender equality, and promotes the participation of women in the maritime sector.
- Under the Oceans Protection Plan, we continue to address the underrepresentation of women, Northerners, and Indigenous peoples in the marine sector via new training and learning opportunities. The Marine Training Program supports Canada’s marine workforce by reducing barriers and creating opportunities for underrepresented groups like women, Northerners and Indigenous peoples, to train and earn jobs in the marine sector. The program is offered at the:
  - [Nunavut Fisheries and Marine Training Consortium](#)<sup>xlviii</sup>
  - [Nova Scotia Community College](#)<sup>xlix</sup>
  - [British Columbia Institute of Technology](#),<sup>l</sup> in partnership with [Camosun College](#)<sup>li</sup>
- In 2019-20:
  - Under the BC Institute of Technology’s project, 17 students graduated and many students have received job offers from the Canadian Coast Guard, Seaspan and West Coast Launch Ltd.
  - Under the Nova Scotia Community College project, 24 students completed the Small Vessel Operator Proficiency, and over 50 students are in ongoing courses
  - Under the Nunavut Fisheries and Marine Training Consortium project, over 160 courses were delivered and several individuals were employed by the Canadian Coast Guard in the Northwest Territories
  - We faced challenges in delivering in-person classes late in the year due to the COVID-19 pandemic



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## Experimentation

- We continued work on the Pre-load Air Cargo Targeting and Artificial Intelligence (PACT+AI) initiative:
  - We were able to successfully test the web portal for industry data submissions. The data was successfully sent, parsed, and visualized; however, we were not able to fully develop and test on near-end states of a minimal viable product
  - The user interface and visualization of advance cargo information was successful and included initial integration of risk scoring and assessment methods to identify high risk cargo test data
  - The next phase seeks full minimal viable product development with prototype A/B testing (a research method for testing two variants represented by A and B against each other) that will test feasibility of remote access and portal assessment and reliability of the risk score, user interface, and portal to enable robust risk assessment to flag new shippers, outlier and anomaly detection, and high risk cargo identification. This will support production development and deployment with capacity to ingest advance cargo information for all inbound shipments prior to uplift on aircraft
- In partnership with consortium members, we tested the first blockchain-based identity management platform between two Government of Canada departments. This testing is a significant milestone towards implementing and rolling-out the Known Traveller Digital Identity pilot project
- Made progress on novel approaches to test technologies and processes that will help develop safety and security regulations or non-regulatory measures like:
  - Commercially testing drones beyond the visual line-of-sight through pilot projects
  - Cooperative Truck Platooning Pilot Project
  - Smart city test bed
  - Test pilot for increased delegation of authority to manufacturers for issuing flight permits
  - Regulatory sandbox for dangerous goods electronic shipping documents

## Results Achieved – Result 1: A Safe Transportation System

Departmental results	Departmental Results Indicators	Target	Date to achieve target	2017-18 Actual Results	2018–19 Actual results	2019–20 Actual results
1a) A safe transportation system	Ten-year aircraft accident rate <sup>1</sup> (average per year, per 100,000 aircraft movements)	Target is for the rate not to increase year over year	2020-03-31	N/A <sup>2</sup> – New Indicator	3.2 per 100,000 movements	3.2 per 100,000 movements
1b) A safe transportation system	Ten-year aircraft fatality rate (average per year, per 100,000 aircraft movements)	Target is for the rate not to increase year over year	2020-03-31	N/A - New Indicator	0.7 per 100,000 movements	0.6 per 100,000 movements
1c) A safe transportation system	Ten-year marine accident rate (average per year, per 1,000 commercial vessels) <sup>3</sup>	Target is for the rate to not increase year-over-year	2020-03-31	N/A - New Indicator	8.8 per 1,000 commercial vessels	3.1 per 1,000 commercial vessels
1d) A safe transportation system	Ten-year marine fatality rate (average per year, per 1,000 commercial vessels)	Target is for the rate to not increase year-over-year	2020-03-31	N/A - New Indicator	0.45 per 1,000 commercial vessels	0.2 per 1,000 commercial vessels
1e) A safe transportation system	Ten-year rail accident rate (average per year, per million-train miles)	5% reduction in the rate as compared to the average of previous five years <sup>4</sup>	2020-03-31	3.7% reduction	5.2% reduction	17% reduction

<sup>1</sup> This includes foreign-registered aircraft operating in Canada for both the accident and fatality rates.

<sup>2</sup> N/A = Not applicable or data not available

<sup>3</sup> This includes unique foreign vessel arrivals, registered Canadian vessels under 15 gross tonnes (GT) and certificated vessels over 15GT operating in Canadian waters.

<sup>4</sup> For indicators 1e and 1f, reductions in accident and fatality rates depend on collaboration between railway companies, road authorities and private authorities who share the responsibility for the implementation of measures to reduce these rates. This is the reason why we chose a 5% annual reduction rate.

1f) A safe transportation system	Ten-year rail fatality rate (average per year, per million-train miles)	5% reduction in the rate as compared to the average of previous five years	2020-03-31	12.5% reduction	26% reduction	7% reduction
1g) A safe transportation system	Rate of reportable road traffic collisions in Canada (rate per billion vehicle kilometres travelled)	1% reduction in the rate for current year as compared to the average of the previous five years	2020-03-31	6.8% reduction in 2016 as compared to the five year average (2011–15)	5.2% reduction in 2017 as compared to the five year average (2012–16)	7.2% reduction in 2018 as compared to the five year average (2013-17)
1h) A safe transportation system	Rate of serious injuries in reportable road traffic collisions in Canada (rate per billion vehicle kilometres travelled)	1% reduction in the rate for current year as compared to the average of the previous five years <sup>5</sup>	2020-03-31	6.8% reduction in 2016 as compared to the five year average (2011–15)	13.4% reduction in 2017 as compared to the five year average (2012–16)	15.6% reduction in 2018 as compared to the five year average (2013-17)
1i) A safe transportation system	Rate of fatalities in reportable road traffic collisions in Canada (rate per billion vehicle kilometres travelled)	1% reduction in the rate for current year as compared to the average of the previous five years	2020-03-31	9.5% reduction in 2016 as compared to the five year average (2011–15)	10.9% reduction in 2017 as compared to the five year average (2012–16)	4.7% reduction in 2018 as compared to the five year average (2013-17)

<sup>5</sup> For indicators 1h and 1i, while we've historically gotten results far better than the established targets, this will change going forward as the significant decreases in fatalities, and to some extent injuries, has decreased. Transport Canada also has limited control over road injuries and fatalities.

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1j) A safe transportation system	Rate of reportable releases of dangerous goods per year (the number of reportable releases divided by the nominal Canadian Gross Domestic Product for the year	1% reduction in the rate for current year as compared to the average of the previous year	2020-03-31	N/A as new indicator created in 2018/19	225.72	202.64
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## Results Achieved - Result 2: A Secure Transportation System

Departmental results	Departmental Results Indicators	Target	Date to achieve target	2017-18 Actual Results	2018–19 Actual results	2019–20 Actual results
2a) A secure transportation system	Rate of compliance of air sector operators with Transport Canada's security regulations	90%	2020-03-31	90.08%	91.8%	93.03%
2b) A secure transportation system	Rate of compliance of marine sector operators with Transport Canada's security regulations	80%	2020-03-31	84%	76%	78.4%
2c) A secure transportation system	Rate of refusals of new Transportation Security Clearance applications	Indicator does not have a target because we do not set targets/quotas on the volume of files we refuse, suspend or cancel.	2020-03-31	89.25	91.74	62.74
2d) A secure transportation system	Rate of suspensions of Transportation Security Clearances	Indicator does not have a target because we do not set targets/quotas on the volume of files we refuse, suspend or cancel.	2020-03-31	8.68	10.29	4.68
2e) A secure transportation system	Rate of cancellations of Transportation Security Clearances	Indicator does not have a target because we do not set targets/quotas on the volume of files we refuse,	2020-03-31	6.90	5.46	2.14

		suspend or cancel.				
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### Results Achieved - Result 3: A modern safety and security regime that supports economic growth

Departmental results	Departmental Results Indicators	Target	Date to achieve target	2017-18 Actual Results	2018–19 Actual results	2019–20 Actual results
3a) A modern safety and security regime that supports economic growth	Percentage of Transport Canada aviation security regulations that are aligned with international transportation standards	90%	2020-03-31	100%	100%	100%
3b) A modern safety and security regime that supports economic growth	Percentage of Transport Canada marine security regulations that align with international transportation standards	Target to be established by March 2021	N/A - New indicator	N/A - New indicator	N/A - New indicator	N/A - New indicator
3c) A modern safety and security regime that supports economic growth	Percentage of Transport Canada security regulations aligned with international transportation standards (Transportation of Dangerous Goods)	Target currently being established for presentation in 2020–21	N/A - New indicator	N/A - New indicator <sup>6</sup>	N/A - New indicator	N/A - New indicator

<sup>6</sup> Because of operational constraints, the baseline data for this indicator is delayed for external planning and reporting purposes and as a result it is anticipated that the target will be set for the 2020–21 Departmental Plan/Department Results Report cycle.

3d) A modern safety and security regime that supports economic growth	Percentage of aviation client requests for safety or security authorizations that meet Transport Canada's service standards <sup>7</sup>	83%	2020-03-31	71%	84%	89%
3e) A modern safety and security regime that supports economic growth	Percentage of marine client requests for safety or security authorizations that meet Transport Canada's service standards	80%	2020-03-31	N/A – New Indicator	N/A – New Indicator	99.88%
3f) A modern safety and security regime that supports economic growth	Percentage of transportation of dangerous goods client requests for safety authorizations that meet Transport Canada's service standards	75% of applications for equivalency certificates received are processed within 3 months	2020-03-31	75%	75%	75%
3g) A modern safety and security regime that supports economic growth	Percentage of new Canadian Rail Safety operating and equipment safety rules aligned with the US Rail Safety operating and equipment rules	80%	2020-03-31	N/A – New Indicator	N/A – New Indicator	93%

<sup>7</sup> This indicator, along with the same indicators for marine and the transportation of dangerous goods, promote confidence that Transport Canada's services can be completed effectively, efficiently and not unnecessarily impede economic opportunity to industry.

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3h) A modern safety and security regime that supports economic growth	Percentage of Transport Canada safety regulations aligned with international transportation standards (air)	100% <sup>8</sup>	2020-03-31	N/A – New Indicator	N/A – New Indicator	95.1%
3i) A modern safety and security regime that supports economic growth	Percentage of Transport Canada safety regulations aligned with international transportation standards (marine)	Target to be established by March 2021	2020-03-31	N/A – New Indicator	N/A – New Indicator	N/A – New Indicator

### Budgetary financial resources (dollars)

2019–20 Main Estimates	2019–20 Planned spending	2019–20 Total authorities available for use	2019–20 Actual spending (authorities used)	2019–20 Difference (Actual spending minus Planned spending)
374,213,870	374,213,870	484,807,687	453,703,550	79,489,680

### Human resources (full-time equivalents)

2019–20 Planned full-time equivalents	2019–20 Actual full-time equivalents	2019–20 Difference (Actual full-time equivalents minus Planned full-time equivalents)
3,134	3,479	345

Financial, human resources and performance information for Transport Canada's Program Inventory is available in [GC InfoBase](#).<sup>lii</sup>

<sup>8</sup> This indicator's target is subject to change based on initial result and based on a decision by Transport Canada "that is acceptable to ICAO to file a difference to the requirements in lieu of addressing the non-compliance."



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## Core responsibility 2 – A Green and Innovative Transportation System

### Description

The programs within this core responsibility support the Government's environmental agenda by:

- reducing harmful air emissions
- protecting Canada's ocean and marine environments by reducing the environmental impacts of marine shipping
- affirm our commitment to innovation within the transportation sector

### Results

This fiscal year, we achieved many results that support this core responsibility, the [Minister's mandate letter](#), Transport Canada and [government-wide priorities](#).

Our results are broken down as follows:

- Supported, developed and maintained ongoing relationships and partnerships with First Nations, Inuit and Métis organizations and communities from coast to coast to coast.
- Entered into an Inuit Impact Benefit Agreement with the Qikiqtani Inuit Association, along with Parks Canada and the Department of Fisheries and Oceans. The agreement included:
  - creating the Tallaruptiup Imanga National Marine Conservation Area
  - establishing and taking part in the Aulattiqatigiit Board, which is:
    - overseeing the implementation of the Inuit IIBA
    - managing the conservation area
    - making sure that the Qikiqtani Inuit Association continues to be involved in managing the conservation area
  - building capacity to prepare and support Inuit to deliver some parts of our marine navigation mandate
- Committed to fund, design and develop community harbours in Grise Fiord and Resolute Bay, working with the Government of Nunavut and the Qikiqtani Inuit Association.

- Participated in government negotiations to advance Indigenous interests and achieve Indigenous self-governance and self-determination. This included actively participating in over 20 Recognition of Indigenous Rights and Self-Determination discussion tables led by [Crown-Indigenous Relations and Northern Affairs Canada](#).<sup>liii</sup>
- Participated in government consultations on major resource projects, including responding to Indigenous concerns and issues within Transport Canada’s mandate.
- Helped to develop government policies related to Indigenous issues.
- This included developing an Indigenous Knowledge Policy Framework for proposed project reviews and regulatory decisions to help guide the implementation of the Indigenous knowledge provisions in the legislation proposed under Bills C-68 and C-69.
- Worked with federal and provincial departments to harmonize consultation requirements to make sure that consultations are coordinated and efficient. This work has also helped to reduce the burden on Indigenous groups and peoples.
- Started projects to support the reconciliation agenda by increasing our own awareness and understanding of Indigenous culture, history and rights.
- Provided advice on best practices for consultations and engagement across a broad range of policy, program, regulatory and legislative initiatives.
- Promoted compliance with modern treaty agreements and legal obligations related to Indigenous issues.
- In 2019, as part of the [Oceans Protection Plan](#)’s Northern Low Impact Shipping Corridors Initiative, we completed the first phase of engagements with provincial, territorial and regional governments, and Inuit, Métis and First Nations organizations.
- Protected the marine environment and improved the safety and efficiency of sealift and resupply operations through the [Oceans Protection Plan](#) Safety Equipment and Basic Marine Infrastructure in Northern Communities Initiative.
- Through the [Oceans Protection Plan](#), provided funding through the Safety Equipment and Basic Marine Infrastructure for Northern Communities Initiative. The funding recipients were:
  - The Government of Northwest Territories to buy 4 double-hulled barges to be used by communities
  - The Government of Nunavut for a study to find the marine infrastructure needs of the territory's communities
  - The Government of Nunavut to place 10 mooring bollards ( equipment that let mariners safely attach vessels next to jetties, wharves and berths) in ports and harbours, in 5 communities

- Approved \$234 million in funding for 11 new projects across the three territories as part of the [National Trade Corridors Fund Northern Call for proposals](#).<sup>liv</sup> These projects represent a total investment of \$328 million and help build resilient transportation corridors connecting Arctic communities and position the North for future trade opportunities.
- Secured an additional \$400 million to support projects in Canada’s Arctic and northern regions as part of the [National Trade Corridors Fund](#).<sup>lv</sup>
- Launched a second call for proposals as part of the Safety Equipment and Basic Marine Infrastructure in Northern Communities Initiative to support projects in Nunavut, the Northwest Territories, the Nunavik of northern Quebec and the Nunatsiavut of northern Newfound and Labrador regions.
- Reduced environmental impacts and embraced new technologies, including zero-emission vehicles. Worked through international forums to find ways to reduce environmental impacts from international transportation, including:
  - launching the [Incentive for Zero-Emission Vehicles](#)<sup>lvi</sup> (iZEV) program to support meeting our zero-emission vehicle sales targets. This program provides a point-of-sale purchase incentive on [eligible zero-emission vehicles](#)<sup>lvii</sup>
    - Over 43,000 Canadians and Canadian businesses benefitted from iZEV in 2019-20, and according to IHS Markit new zero emissions vehicle (ZEV) registrations in Canada, the ZEV market share of light-duty vehicles has risen to 3.3% in 2019-20 fiscal year, up from 2.4% in 2018-19 fiscal year<sup>9</sup>.
  - becoming a member of the [International Zero-Emission Vehicle Alliance](#),<sup>lviii</sup> an international group of national and sub-national governments working together to encourage consumers to buy zero-emission vehicles
  - starting the monitoring, reporting and verification phase of the International Civil Aviation Organization’s Carbon Offsetting and Reduction Scheme for International Aviation in Canada. The scheme started on January 1, 2019 for 2 years of reporting before offsetting obligations begin on January 1, 2021
  - The aviation and rail sectors continued to demonstrate fuel efficiency improvements through industry voluntary agreements. The aviation sector

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<sup>9</sup> Figures and information sourced to IHS Markit within this report (March 2018 – April 2020) (the "IHS Markit Materials") are the copyrighted property and of IHS Markit Ltd. and its subsidiaries ("IHS Markit") and represent data, research, or opinions of IHS Markit, and are not representations of fact. The information and opinions expressed in the IHS Markit Materials are subject to change without notice and IHS Markit has no duty or responsibility to update the IHS Markit Materials. Moreover, while the IHS Markit Materials reproduced herein are from sources considered reliable, the accuracy and completeness thereof are not warranted. No further reproduction of this material is allowed without the express written permission of IHS Markit.

improved its fuel efficiency by 18% from 2008-2018 and Class 1 freight railways improved their efficiency by 17% from 2010-2017

- The aviation sector improved its fuel efficiency by 18% from 2008-2018, and Class 1 freight railways improved their efficiency by 17% from 2010-2017.
- The amendments to the Pilotage Act (the Act) received Royal Assent in June 2019. Transport Canada is in the process of implementing the amendments. The first set of amendments to the Act were brought into force in August, 2019. This order in council's provisions restructured the Act and introduced new governance provisions, and purposes and principles. Transport Canada continues to work with the Pilotage Authorities and stakeholders to implement the changes in an organized manner to avoid gaps and ensure the continued safety of the pilotage system. To date three quarters of the amendments of the Pilotage Act have been brought into force.
- Worked on projects that are part of [Oceans Protection Plan](#) to improve marine safety, responsible shipping, and strengthen the environmental stewardship of Canada's coasts. We're preserving and restoring marine ecosystems by using new tools and research methods. We're also addressing abandoned, hazardous and wrecked vessels, including:
  - looking at ways to improve the pleasure craft-licensing system to better identify the owners of crafts
  - developing a national inventory of abandoned or wrecked vessels and a way to prioritize these vessels for removal
  - bringing the [Wrecked, Abandoned or Hazardous Vessels Act](#) into effect in July 2019
- The Act brings the Nairobi International Convention on the Removal of Wrecks, 2007 into Canadian law. The Act bans irresponsible vessel management, strengthens vessel owner responsibility and liability, and improves federal power to take action on problem vessels or wrecks. Over 130 vessels have been dealt with since the new Act came into force.
- In addition, the Government has provided funding to communities to take actions on problem vessels across Canada.
  - removing 58 vessels as part of [Small Craft Harbours Abandoned and Wrecked Vessels Removal Program](#)<sup>lix</sup> in partnership with the Department of Fisheries and Oceans
  - dealing with abandoned, hazardous and wrecked vessels as part of [Abandoned Boats Program](#).<sup>lix</sup> In 2019-20 we [funded](#)<sup>lix</sup> 22 projects to assess abandoned boats, and 67 projects to remove abandoned boats

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- Combined, these actions are helping to restore marine habitats and ecosystems in key areas
    - As part of [Oceans Protection Plan](#) we have met our federal objective of addressing at least 275 abandoned and wrecked vessels by March 31, 2022. This is two years ahead of schedule
  - Continued to support domestic efforts to prevent and reduce marine plastic litter from ship-based activities and represented Canada at the [International Maritime Organization](#)<sup>lxii</sup> to help develop and plan the implementation of the [Action Plan on Marine Plastic Litter from Ships](#).<sup>lxiii</sup>
  - Helped develop knowledge and tools to help the transportation sector adapt to climate change and build resiliency into its infrastructure and operations through the Transportation Assets Risk Assessment initiative and Northern Transportation Adaptation Initiative.
    - Work has focused on airports, ports, arctic marine shipping and critical highway links. Collaborative activities like workshops and a sponsored course have helped to improve multi-modal and interdisciplinary capacity in the sector
  - Started a two-year project to develop new technology for observing and analyzing pollution. For fiscal year 2019-20, the [National Aerial Surveillance Program](#)<sup>lxiv</sup> focused on:
    - creating an innovation called *Spothawk* for real-time geospatial insight data collection while maximizing situational awareness
    - getting the hardware and software for a next generation sensor to allow the aircrews to provide streaming and digital imagery to improve the program's ability to enforce pollution and marine mammal activities
  - Under the [NASP](#), we continued to provide surveillance of waters under Canadian jurisdiction to monitor shipping activities, and in 2019-20:
    - conducted 3,954 surveillance hours which is 95% of its forecasted 4,150 hours. The slight shortfall is attributed to the COVID-19 pandemic whereby surveillance crews were on standby status for the last two weeks of March as opposed to normal operations; and
    - These patrols recorded 31,335 vessels flown over, with an average of 7.9 vessel over-flights per hour. In addition, there were 338,575 vessels monitored with the Automatic Identification System
  - The [National Aerial Surveillance Program](#) also contributed by:
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- supporting Canada's Whales Initiative, including both the North Atlantic Right Whales on Canada's east coast, as well as the Southern Resident killer whales on the west coast
  - responding to 24 urgent calls, and 154 non-urgent calls from the TC Situation Centre
  - supporting 26 search and rescue incidents across Canada
  - carrying out various oil pollution exercises with other government departments in Canada and the United States
  - helping other government departments during flood season by reporting on flood conditions
- In 2019-20, all vessels entering the St. Lawrence Seaway from outside of Canada's exclusive economic zone were inspected for current ballast water requirements, including the ballast water salinity.
  - Worked with Canadian industry, US and international partners towards fair, practicable and environmentally protective ballast water regulations.
  - We published draft regulations in the [Canada Gazette, Part I<sup>lxv</sup>](#) in June 2019 that would address the risk posed by aquatic invasive species and Canada's obligations as part of [International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004.](#)<sup>lxvi</sup>
  - Helped Canadian jurisdictions prepare for the technical, regulatory and policy issues from connected and automated vehicles via our Program to Advance Connectivity and Automation in the Transportation System launched in 2017. It funds research and builds capacity by providing up to \$2.9 million in grant and contribution funding over 4 years to support 15 Canadian connected and automated vehicle projects.
  - Evaluated cooperative truck platooning systems, including aerodynamic, fuel consumption, and dynamic testing. The results will help us develop approaches for safe testing and deployment of these systems.
  - Helped develop a safety research plan for cooperative truck platooning systems. We successfully completed the initial track testing elements of the cooperative truck platooning project. Findings are helping to inform a pilot of this technology on Canadian highways in fiscal year 2021-22 and next steps for the integration of this technology in Canada.
  - Developed and put in place scenarios to test low speed automated driving systems including safe interactions with pedestrians and cyclists. We used results to validate and improve international testing standards for low speed automated driving systems (ISO 22737).
  - Developed two guidance documents in 2019-20:

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- A discussion paper on the safe testing of low speed automated shuttles that is planned for consultation in the near term.
  - [Canada's Vehicle Cybersecurity Guidance](#) (published in May 2020).

### **Gender-based analysis plus**

Our programs in Core Responsibility 2, “A Green and Innovative Transportation System”, have identified many gender-based analysis plus (GBA+) initiatives and issues they are either currently working on or that have recently been completed in the past fiscal year. The most notable was:

- Recognizing opportunities to increase the representation of women in the northern research community, the Northern Transportation Adaptation Initiative sponsored 13 students, including 11 women, to participate in conferences and events to support the development of networks and expertise.
- The program also invited annual meeting participants to identify whether childcare expenses would be a barrier to their participation in the event.

### **Experimentation**

We’ve identified the following Core Responsibility 2 that involve experimentation. The initiatives include:

- The Remotely Piloted Aircraft System right whale mission in 2019 successfully refined operations and analytics to allow for efficient detection of North Atlantic right whales that can be integrated into dynamic measures to protect whales in 2020.
- In October 2018, Transport Canada issued an Innovative Solutions Canada challenge called [Enhancing Pedestrian and Cyclist Road Safety](#).<sup>lxvii</sup> The goal of this challenge is to save lives and reduce injuries by accelerating the adoption of effective, low-cost technologies that improve pedestrian and bicyclists' safety around commercial vehicles.
- In phase 1, the challenge gave up to \$150,000 to two Canadian small businesses to develop a proof of concept for an effective, low cost vulnerable road user warning system for commercial vehicles. Labforge Inc and Brisk Synergies Tech Corp received this funding
- In phase 2, Labforge Inc received up-to \$500,000 to develop a prototype based on proof-of-concept.
- We also gave \$2,265,529 in grant funding to support the Government’s Innovation and Skills Plan. We designed challenges for Canadian industry, academia and individuals to develop proposals for innovative solutions, specifically:



- \$419,000 to three recipients to develop a proof of concept for economically viable and environmentally sustainable methods for recycling glass fiber-reinforced plastic used in vessel hulls so that the waste wouldn't go to landfills. Recipients submitted final reports in fall 2019 and we invited them to submit prototype proposals for the next phase of grant funding to be awarded in 2020-21
- affordable after-market technology solutions for commercial vehicles to help detect vulnerable road users, such as cyclists and pedestrians, and alert the driver of potential collisions
- Applicants for the Northern Transportation Adaptation Initiative grant funding were required to include at least one outreach session at a local school in any projects involving travel to one or more northern communities. This was a new way of encouraging researchers to translate their work into more accessible language, and to support the capacity of systems to adapt to climate change, a key objective of the initiative.
- To address an ongoing need to better understand our adaptive capacity, the department piloted applying a diagnostic tool to assess gaps and opportunities across key departmental functions. We will integrate actions to build our ability to adapt to change within our next climate change adaptation plan.

### Results achieved - Result 4: Harmful air emissions from transportation in Canada are reduced

Departmental results	Performance indicators	Target	Date to achieve target	2017–18 Actual results	2018–19 Actual results	2019–20 Actual results
4a) Harmful air emissions from transportation in Canada are reduced	Greenhouse gas emissions intensity for Canadian commercial air carriers	Average annual improvements in aviation fuel efficiency of at least 1.5% per year until 2020 from a 2008 baseline	2020-12-31	860 grams per revenue tonne kilometre for 2017 – a 1.87% annual average improvement from 2008	832 grams per revenue tonne kilometre for 2018 – a 2% annual average improvement from 2008	Data for the 2019 calendar year is expected in Fall 2020
4b) Harmful air emissions from transportation in Canada are reduced	GHG emissions intensity for domestic marine transportation	To be established by March 31, 2023, in line with the development of	TBD	Latest available information is for 2017 and	N/A – New Indicator	N/A – New Indicator



		new International Maritime Organization regulatory requirements (2021-22) and long-term strategy to reduce GHG emissions (2023)		indicates a 36% improvement in grams CO <sub>2</sub> e per tonne-kilometre from 2010 (42.0 g/TKM) to 2017 (26.9 g/TKM).		
4c) Harmful air emissions from transportation in Canada are reduced	GHG emissions intensity for freight rail transportation	A Memorandum of Understanding with the Railway Association of Canada to reduce locomotive emissions from 2018-2022 was renewed. It includes a target to improve the GHG emission intensity of Class 1 freight railways <sup>10</sup> CO <sub>2</sub> e <sup>11</sup> by 6% per 1000 revenue tonne kilometres <sup>12</sup> from a 2017 baseline	2022-03-31	The 2017 result was 13.53 kg CO <sub>2</sub> e per 1000 revenue tonne kilometres – a 16.99% improvement from the 2010 baseline year and a 0.4% increase from the previous year	2018 results will be reflected in 2018 Locomotive Emissions Monitoring Report available December 2020	2019 results will be reflected in 2019 Locomotive Emissions Monitoring Report available December 2021

### Results achieved - Result 5: Canada's oceans and marine environments are protected from marine shipping impacts

Departmental results	Performance indicators	Target	Date to achieve target	2017–18 Actual results	2018–19 Actual results	2019–20 Actual results
5a) Canada's oceans and marine	Rate of spills into Canada's oceans and	Spills into Canada's oceans and	2020-03-31	N/A - New Indicator	0.15/hr	0.0015/hr

<sup>10</sup> Class 1 freight railways include Canadian Pacific Railway and Canadian National Railway.

<sup>11</sup> CO<sub>2</sub>e Carbon dioxide equivalent.

<sup>12</sup> A "revenue tonne-kilometre" is generated when a metric tonne of revenue load is carried one kilometre.

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environments are protected from marine shipping impacts	marine environment (per 1,000 commercial vessels) <sup>13</sup>	<p>marine environment decline over time in relation to the level of activity</p> <p>The rate of spills is calculated per hours flown per year</p> <p>Reporting focuses on spills over 10 litres, as smaller spills are typically non-recoverable and have a negligible impact on the environment.</p>				
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**Results achieved - Result 6: A transportation system that supports innovation**

Departmental results	Performance indicators	Target	Date to achieve target	2017–18 Actual results	2018–19 Actual results	2019–20 Actual results
6a) A transportation system that supports innovation	Number of new aeronautical products certified	Variance remains +/- 10% year-over-year	2020-03-31	N/A – New Indicator	820	N/A: The indicator is in the process of being revised, to better capture and report on the department's innovation agenda.
6b) A transportation system that supports innovation	The number of motor vehicle features introduced in Canada through the use of Transport	Average annual increase of 10% in Advanced Driver Assistance System technologies in	2023-03-31	N/A – New Indicator	N/A – New Indicator	N/A: The indicator is in the process of being revised, to better

<sup>13</sup> In 2019-20, the Results Indicator was modified to exclude all the minor ship source spills under 10 litres and therefore will reflect a significant change in the way the statistics are analyzed.

	Canada's regulatory tools that facilitate innovative technologies	the overall light duty fleet in Canada <sup>14</sup>				capture and report on the department's innovation agenda.
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**Budgetary financial resources (dollars)**

2019–20 Main Estimates	2019–20 Planned spending	2019–20 Total authorities available for use	2019–20 Actual spending (authorities used)	2019–20 Difference (Actual spending minus Planned spending)
252,398,761	252,398,761	553,770,224	389,635,911	137,237,150

<sup>14</sup> We will be measuring the increase in advanced driver assistance systems (ADAS) that are standard equipment on light duty vehicles in the Canadian fleet. We will undertake the analysis to generate year-over-year changes to report on for this indicator. As with similar database-sourced information, the reference period of the data source will not align exactly with the reporting period (i.e., there will be a time lag).

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**Human resources (full-time equivalents)**

2019–20 Planned full-time equivalents	2019–20 Actual full-time equivalents	2019–20 Difference (Actual full-time equivalents minus Planned full-time equivalents)
606	629	23

Financial, human resources and performance information for Transport Canada's Program Inventory is available in [GC InfoBase<sup>lxviii</sup>](#).

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## Core responsibility 3 – An Efficient Transportation System

### Description

The programs in this core responsibility:

- support market access to products by investing in Canada’s trade corridors
- use rules to make sure Canadian air travellers have enough choice and better service
- manage transportation assets to ensure value for Canadians

### Results

To support this Core Responsibility, the [Minister’s mandate letter](#), as well as Transport Canada and [government-wide priorities](#), we:

- Provided better choice and service, lowered costs and improved consumer rights. For example:
  - Canada concluded five new or expanded international air transport agreements, which allow Canadian and foreign carriers to launch new or expanded scheduled international air services. The agreements are with: Tunisia, Grenada, Ecuador, Chile, and Turkey
  - Improved consumer rights by fully putting in place the [Air Passenger Protection Regulations](#)<sup>15</sup> enabled by the [Canada Transportation Act](#) while continuing to explore with the industry ideas and opportunities to lower costs
  - Allowed the First Air purchase and merger of Canadian North to proceed, albeit with conditions to ensure reliability and continued air services for northern and remote communities, including monitoring and reporting requirements, to guard against monopoly behavior
  - Started a public interest review of a proposed acquisition of Transat AT by Air Canada
- Worked with provinces, territories, and other government departments to implement a temporary cost-sharing initiative to help provinces fill gaps in service resulting from Greyhound’s wide-spread service reductions west of Sudbury, Ontario in 2018
- Improved the performance and reliability of Canada’s transportation system to get products to market and grow our economy, including working on the Ports Modernization Review with the goal of updating their current and future role in the

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<sup>15</sup> June 19, 2019.

transportation system as innovative assets that support inclusive growth and trade. We also focused on:

- bringing the [Security Screening Services Commercialization Act](#)<sup>lxx</sup> into effect. When completed this means that the functions of the [Canadian Air Transport Security Authority](#)<sup>lxxi</sup> will be transferred to a private company that will operate on a not-for-profit basis independently of any government funding, similar to [NAV CANADA](#).<sup>lxxii</sup>
- the Minister designated Air Canada and WestJet to operate scheduled international air services on which air cargo can be transported, which will help shippers get their products to markets in a more reliable and efficient manner.
- putting in place the [Transportation Modernization Act](#),<sup>lxxiii</sup> launched public consultations and continued to develop a regulatory proposal to refine freight rail data reporting to further improve transparency and make the information that we provide more useful to the public .
- Consulted with industry stakeholders, the Saint Lawrence Seaway Management Corporation, federal government partner departments, and the International Joint Commission, to look for ways to maintain safe shipping along the Montreal-Lake Ontario section of the Saint Lawrence Seaway in the face of high water flows needed to help relieve the severe flooding of shoreline communities.
- Invested in transportation infrastructure projects through the National Trade Corridors Fund that strengthen Canada's trade infrastructure. These included ports, airports, roads, bridges, border crossings, rail networks, and the interconnectivity between them, including:
  - completing the National Trade Corridors Fund Northern call for proposals, committing \$234 million in federal funding to 11 projects representing total investments of \$328 million in the territorial North across various modes of transportation
  - Evaluated 48 expressions of interest and 31 comprehensive project proposals as part of the Northern call for proposals.continuing the (still-open) National Trade Corridors Fund's Continuous call for proposals for trade diversification projects. We committed over \$705 million in federal funding to 35 projects representing total investments of \$1.6 billion
    - Evaluated 103 expressions of interest and 44 comprehensive project proposals as part of NTCF Continuous call for proposals.
    - Led more than 100 interactions with approximately 55 separate proponents to guide potential applicants to the NTCF's Continuous call

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for proposals, which helped improved the ratio of successful applications

- Evaluated 48 expressions of interest and 31 comprehensive project proposals as part of NTCF'S Northern call for proposals.
- Evaluated 103 expressions of interest and 44 comprehensive project proposals as part of National Trade Corridors Fund's Continuous call for proposals for trade diversification projects.
- Led more than 100 interactions with around 55 separate proponents to guide potential applicants to the National Trade Corridors Fund's continuous call for proposals, which helped improved the ratio of successful applications.
- At the end of 2019-20, about 95% of the initial National Trade Corridors Fund's allocation had been committed to strategic transportation projects that help Canadians to compete in key global markets.
- Worked with Canadians to divest ports to new owners who are better placed to manage and operate these ports; seven ports were transferred in 2019-20.
- Continued to pursue a long-term approach to provide ferry services in eastern Canada. This included selecting a Canadian shipyard to design and build two new ferries to replace the *MV Madeleine* and *MV Holiday Island*, and selecting a team of external advisors to support the project through the provision of expert technical advice.
- Ensured Transport Canada's airports and ports remain available for use by investing in health and safety related capital investments. Of the 5 projects funded through Budget 2018, one is complete and the others are in progress.
- Implemented legislative provisions<sup>16</sup> and regulations<sup>17</sup> to introduce a cost-recoverable process that is streamlined and predictable for air carriers looking for the consideration and decision of the Minister for their joint venture applications.
- Implemented the [Air Passenger Protection Regulations](#)<sup>18</sup> enabled by the [Canada Transportation Act](#). They provided a standardized regime to protect air travellers by ensuring clear, more consistent passenger rights. They established minimum requirements, standards of treatment and, in some situations, minimum levels of compensation that all air carriers operating to, from and within Canada must provide.

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<sup>16</sup> Pursuant to Order in Council [P.C. 2019-221](#) with respect to the [Transportation Modernization Act](#).

<sup>17</sup> Pursuant to Order in Council [P.C. 2019-220](#) with respect to the [Regulations Respecting Fees for the Review of Arrangements Involving Transportation Undertakings Providing Air Services](#) a.k.a the Cost Recovery Regulations authorized by the [Canada Transportation Act](#).

<sup>18</sup> Effective December 15, 2019.

- Implemented a framework to help airport operators that apply for administrative designation or new or more screening services using a system that allows them to recover their costs with the Canadian Air Transport Security Authority as part of [Transportation Modernization Act](#).
- Worked with provinces and territories, other government departments, and stakeholder groups to explore creative best practices and innovative solutions that could help deal with the challenges affecting surface mobility in Canada.
- Conducted a study to develop a better understanding of the intercity surface mobility needs of various population groups across Canada.
- Following the Minister of Transport’s mandate letter, worked with Infrastructure Canada and provided advice and analysis to help create High Frequency Rail in the Toronto-Quebec City corridor. This included creating the Joint Project Office, which is responsible for completing the following due diligence and de-risking activities:
  - finalizing legal and regulatory work related to safety and environmental assessments
  - consulting with stakeholders and Indigenous communities
  - examining required land and track acquisition
  - completing the technical, financial, and commercial analysis for the project
- At this stage, we don’t expect the overall timelines of the High Frequency Rail project to be significantly impacted because of COVID-19. There are some required stages of work, particularly those focused on external engagement, that will be delayed however. For example, the potential launch of an Impact Assessment, as well as engagement with Indigenous and local communities, could likely be pushed back, so overall delays are still possible.
- Working with Statistics Canada, completed the initial implementation of the [Trade and Transportation Information System](#).<sup>lxxiv</sup> We did this by creating the Canadian Centre on Transportation Data and the [Transportation Data and Information Hub](#)<sup>lxxv</sup> in 2018. Work continues through the centre and hub to help stakeholders and the public get better access to authoritative data so that they can make better informed decisions. Actions to date include developing the:
  - Air Transport Performance Dashboard
  - Travel Time Index Dashboard
  - Supply Chain Visibility Projects across Canada
- Put in place the Transportation Modernization Act public reporting requirements by establishing and effectively managing:
  - Data Governance:



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- Began laying the foundation for an integrated data catalog within the department's governance practices with the end goal of ensuring a complete understanding of the department's data assets and data limitations
  - Began formally establishing industry best practices for data governance including formally separating development and production environments
  - Capacity:
    - Modernizing analytical capacity using cloud-based analytics through the Enterprise Business Intelligence and Data Analytics project
    - Enhancing geospatial data representation through the Enterprise Geospatial Information System project
    - Enhanced integrated Business Intelligence data virtualization and visualization capabilities by adopting industry best practice tool sets ( for example Power BI, Python, and R)
    - Continued efforts to move Electronic Collection of Air Transportation Statistics away from its existing legacy servers onto a more stable and reliable virtualized platform
  - Dealt with labour shortages in aviation by working with industry and stakeholders by:
    - improving outreach to women and Indigenous peoples, collecting data and doing more research on the barriers they face
    - supporting training institutions and individuals to support job creation, and making sure have a fully capable and diverse aviation workforce
    - supporting the First Nations Technical Institute, an Indigenous-led aviation training facility, through a Government of Canada investment of \$4.9 million over three years, starting in September 2019
  - Developed a multimodal strategy for labour shortages across the transportation sector, which includes:
    - collaboration with other federal departments
    - regulatory modernization
    - public promotion and outreach
    - enhancing data, research and analysis

## **Gender-based analysis plus**

- When considering improvements to the economic policy framework to better serve air travellers, we looked for opportunities and different impacts of the proposed way forward on diverse groups of male and female travellers. One of these opportunities involved looking for ways to lower costs for travellers. The tendency to travel is roughly equal between men and women, but middle and upper income individuals are more frequent travellers than lower income individuals. So lowering costs and improving the traveller experience, while more helpful to lower income individuals, would still also help to make air travel generally more affordable for a bigger part of the Canadian population.
- Air travel is relatively more expensive in Canada compared to other developed nations because the country is very big and has a low population density. Any benefits that come about from lowering costs tend to go to the traveler, specifically, as well as the economy, and make air transportation more widely available.
- We don't expect the [Trade and Transportation Information System](#) and the Bill C-49 public reporting requirements to marginalize or negatively affect Canadians based on gender or relative vulnerability. We expect that improving evidence gathering will help all those who depend on the transportation system, regardless if they belong to a particular class or group of the Canadian population. The recipients under National Trade Corridors Fund are provinces, territories, municipalities, indigenous organizations, private and public sector companies and academia. As these are not individuals, and the department selects applicants based on the degree that their projects will benefit Canada's transportation network (which ultimately benefits all Canadians regardless of race, gender or sexual orientation), we don't collect micro-data on individual recipients of National Trade Corridors funding.
- Once the Ports Modernization Review is complete and potential options or measures are being examined, we will bring the gender-based analysis plus view into the analysis and promote gender equality, diversity and inclusiveness.

### **Experimentation**

We have not identified any Core Responsibilities 3 experimentation initiatives for 2019-2020.

## Results Achieved - Result 7: Transportation corridors get products reliably to market

Departmental results	Performance indicators	Target	Date to achieve target	2017–18 Actual results	2018–19 Actual results	2019–20 Actual results
7a) Transportation corridors get products reliably to market	End-to-end transit time of containerized freight arriving from ports in Asia <sup>19</sup>	At most 25 days	2020-03-31	25.3 Days	27.4 Days	25.9 Days
7b) Transportation corridors get products reliably to market	End-to-end transit time of a select grouping of commodities, such as grains, departing from Canada to Asia <sup>20</sup>	At most 38.5 days	2020-03-31	38.5 Days	39 Days	39.5 Days
7c) Transportation corridors get products reliably to market	End-to-end, rail transit time of containers along the trade corridor from Canadian west coast ports to Chicago, including border crossing time, measured as the transit time to travel by rail from ports in British Columbia to Chicago.	At most 6.2 Days	2020-03-31	6.1 Days	7 Days	6.5 Days
7d) Transportation corridors get products reliably to market	End-to-end, Canada-side, truck transit time of general freight along the Toronto to United States trade corridor,	N/A	N/A	N/A	N/A	3.4 Hours

<sup>19</sup> Measured as the transit time to travel by ship from Shanghai to ports in British Columbia, with onwards direct rail shipping to Toronto.

<sup>20</sup> Measured as the transit time for grain to travel from Saskatchewan to Chinese ports via the Port of Vancouver.

	including border crossing time, measured as the transit time for trucks to travel from Toronto to the US border at Windsor/Sarnia including the crossing time.					
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### Results Achieved - Result 8: Canadian air travellers benefit from choice and increased service

Departmental results	Performance indicators	Target	Date to achieve target	2017–18 Actual results	2018–19 Actual results	2019–20 Actual results
8a) Canadian air travellers benefit from choice and increased service	Frequency of flights on air service routes within Canada and between Canada and other countries	At least 1% increase	2019-12-31	N/A	N/A	1,369,233
8b) Canadian air travellers benefit from choice and increased service	Number of air service routes within Canada and between Canada and other countries	At least 1% increase	2020-12-31	N/A	N/A	1,227
8c) Canadian air travellers benefit from choice and increased service	Number of scheduled passenger air service routes within Canada (domestic routes)	0.2% increase in the 10-year average comparisons: 2010-2019 versus 2009-2018  No change, i.e. target not met because the market is mature	2019-12-31	615	610	575
8d) Canadian air travellers benefit from choice and	Number of scheduled passenger air service routes between Canada and	0.2% increase in the 10-year average comparison: 2010-2019	2019-12-31	213	223	230

increased service	the United States (transborder routes)	versus 2009-2018 Target exceeded. 0.72% increase in rolling 10yr average				
8e) Canadian air travellers benefit from choice and increased service	Number of scheduled passenger air service routes between Canada and other countries (international routes <sup>21</sup> )	1% increase in the 10-year average comparisons: 2010-2019 versus 2009-2018  Target exceeded. 3.3% increase in rolling 10yr average	2019-12-31	432	439	422 <sup>22</sup>
8f) Canadian air travellers benefit from choice and increased service	Number of scheduled passenger flights within Canada (annual grand total, domestic flight segments)	1% increase in the 10-year average comparison: 2010-2019 versus 2009-2018  Target not met. 0.39% fall in rolling 10yr average	2019-12-31	851,927	856,927	800,029
8g) Canadian air travellers benefit from choice and increased service	Number of scheduled passenger flights between Canada and the United States (annual grand total, transborder flight segments)	0.2% increase in the 10-year average comparison: 2010-2019 versus 2009-2018  Target not met. 0.04% rise in	2019-12-31	387,549	400,119	394,524

<sup>21</sup> "Other international" includes all routes to/from foreign countries, except the United States. This footnote applies to results indicators 8c and 8f.

<sup>22</sup> Some flights to Mexico and Cuba operated during 2018 ceased in 2019.

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		rolling 10yr average				
8h) Canadian air travellers benefit from choice and increased service	Number of scheduled passenger flights between Canada and other countries (annual grand total, international flight segments)	1% increase in the 10-year average comparisons: 2010-2019 versus 2009-2018  Target exceeded. 7.39% increase in rolling 10yr average	2019-12-31	162,389	172,828	174,828

**Results Achieved - Result 9: Transport Canada manages its assets effectively**

Departmental results	Performance indicators	Target	Date to achieve target	2017–18 Actual results	2018–19 Actual results	2019–20 Actual results
9a) Transport Canada manages its assets effectively	Availability of Transport Canada owned and managed airports	100% (certain types of events are excluded from the calculation) <sup>23</sup>	2020-03-31	N/A – New Indicator	100%	100%
9b) Transport Canada manages its assets effectively	Availability of Transport Canada owned and managed ports	100% (certain types of events are excluded from the calculation) <sup>24</sup>	2020-03-31	N/A – New Indicator	100%	100%
9c) Transport Canada manages its assets effectively	Availability of Transport Canada owned and managed ferries	100% (certain types of events are excluded from the calculation) <sup>25</sup>	2020-03-31	N/A – New Indicator	100%	100%

<sup>23</sup> Any planned closure/cancellation required for maintenance reasons to ensure safe operations is excluded from the calculation. In addition, any closure/cancellation due to causes that cannot be anticipated and/or are beyond the control of the department, such as weather-related issues, natural disasters, or employee strikes is excluded.

<sup>24</sup> Any planned closure/cancellation required for maintenance reasons to ensure safe operations is excluded from the calculation. In addition, any closure/cancellation due to causes that cannot be anticipated and/or are beyond the control of the department, such as weather-related issues, natural disasters, or employee strikes is excluded.

<sup>25</sup> Any planned closure/cancellation required for maintenance reasons to ensure safe operations is excluded from the calculation. In addition, any closure/cancellation due to causes that cannot be anticipated and/or are beyond the control of the department, such as weather-related issues, natural disasters, or employee strikes is excluded.

**Budgetary financial resources (dollars)**

2019–20 Main Estimates	2019–20 Planned spending	2019–20 Total authorities available for use	2019–20 Actual spending (authorities used)	2019–20 Difference (Actual spending minus Planned spending)
879,349,998	879,349,998	906,481,002	644,930,752	(234,419,246)

**Human resources (full-time equivalents)**

2019–20 Planned full-time equivalents	2019–20 Actual full-time equivalents	2019–20 Difference (Actual full-time equivalents minus Planned full-time equivalents)
463	488	25

Financial, human resources and performance information for Transport Canada's Program Inventory is available in [GC InfoBase<sup>lxvii</sup>](#).

## Internal Services

### Description

Internal services are groups that support programs, or that are required to meet corporate obligations of an organization. Internal services refers to the activities and resources of the 10 distinct service categories that support program delivery in the organization, regardless of the Internal Services delivery model in a department. The 10 service categories are:

- Acquisition Management Services
- Communication Services
- Financial Management Services
- Human Resources Management Services
- Information Management Services
- Information Technology Services
- Legal Services
- Material Management Services
- Management and Oversight Services
- Real Property Management Services

### Results

To support our internal services programs, the [Minister's mandate letter](#) and Transport Canada and [government-wide priorities](#), we:

- Updated the [Canada Transportation Act](#) to allow for the electronic administration and enforcement of any Act or regulation that Transport Canada oversees, which removed barriers to digital service delivery.
- Updated the [Canada Transportation Act](#) to authorize exemptions, again from requirements in any Act or regulation that Transport Canada oversees, to allow for promotion of innovation through research, development or testing in the transportation sector.
- Prepared proposed amendments, that we will set into motion in 2020-21 and future years, focused on modernizing core elements of our regime, such as compliance and enforcement authorities, as well as authorities to further support service delivery, regulatory flexibility, and an improved response capability.
- Launched the development and rollout of a Service Management Framework. When we deliver it in 2020-21, the framework will guide and support end to end internal



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and external service improvement and digitization objectives. It will also guide improved performance reporting and help the department transition to consistent, effective online services.

- Transport Canada completed the creation of its Centre of Excellence on Strategic Investments. The Centre provided expertise and leadership to the commercial components of large-scale projects, notably by:
  - Supporting the in-depth assessment of VIA Rail’s High Frequency Rail Proposal and the establishment of a Joint Project Office between VIA and the Canada Infrastructure Bank;
  - Developing a negotiation framework and strategy to support the sale of the Canadian Air Transport Security Authority (CATSA) to a not-for-profit corporation comprised of Canada’s air carriers and airports;
  - Supporting a number of other priority projects, such as the Lac-Mégantic railway bypass, Marine Atlantic Inc. ferry procurement and additional initiatives such as support for the Canadian air sector in response to COVID-19.
- Focused on planning and designing of a cost recovery service management tool. The tool will launch in 2020-21 and will support time tracking, calculating remissions, and improved performance reporting.
- In 2019-20, Internal Audit provided ongoing oversight to the [Oceans Protection Plan](#) and Transport Canada’s Transformation. Because of departmental priorities, we rescheduled the Audit of Data Governance and the Review of Organizational Culture to 2020-21.
- Evaluated the [Rail Safety Improvement Program](#)<sup>lxxvii</sup> in May of 2020. The Program developed a comprehensive Management Action Plan that should help to enhance program delivery moving forward. Because of departmental priorities and information needs, we rescheduled evaluations related to TC’s Comprehensive Review, Fee Modernization, and the [Trade and Transportation Corridor Initiative](#).<sup>lxxviii</sup>
- Reviewed the performance measurement structures of Marine Safety and Security and Rail Safety. The results will help improve their performance measurement structures and prepare them for future internal and external reviews.
- The Communications Group supported the key priorities of the Minister and the department’s programs and initiatives using various communications platforms to effectively inform and engage Canadians. The department delivered information on a variety of Ministerial and departmental priorities, including Zero Emission Vehicles, National Trade Corridors Fund, Air, Rail, Whales, and [Oceans Protection Plan](#).

- Communications took a digital first approach in serving Canadians by posting content to our website, providing information on our social media platforms (Facebook, Twitter and Instagram), and providing information by video and infographics. Using a mix of digital platforms, we delivered information to Canadians where they're active.

## **Experimentation**

We've identified the following internal service initiatives that involve experimentation. They include:

- We increased use of modern technologies in Finance and Administration to improve productivity, strengthen internal control, improve client service and support effective decision-making, including:
  - using of data analytics by creating a series of interactive self-service dashboards to improve the presentation of financial information to help managers and staff make better, more data-driven decisions. Key metrics, indicators and insights are generated at the click of a button
  - creating a robotics process automation for some finance processes and sharing experience and lessons learned with other interested departments
- To support Transformation objectives, the department explored new disruptive technologies (AI, Blockchain, Machine Learning and Robotics). Examples include:
  - Completing proofs of concept and experimentation on use of AI for cargo screening (Pre-Load Air Cargo Targeting Pilot), Robotic Process Automation to support financial reporting and transactions
  - Launching a pilot for voice-enabled motor vehicle recalls (Vehicle Recalls Canada Alexa Skills Pilot), and advancement of the Known Traveller Digital Identity pilot project
  - Developing broader artificial intelligence capabilities to provide data-driven solutions for business units to make evidence-based decisions on risk and performance

## **Gender-based analysis plus (GBA+)**

Our internal services have identified several gender-based analysis plus initiatives and issues they are either currently working on, have recently completed or plan to work on in the coming fiscal year and beyond. The most notable examples include:

- Applying the policies and regulations of the Official Languages Act and the Canadian Charter of Rights and Freedoms, which inform all the work we do.

- When producing graphics and videos depicting real people, our designers and videographers ensure a balance of different genders (often in non-traditional roles) as well as various ethnicities and Canadians with disabilities. Other graphics feature gender-neutral images.
  - The designers use this practice for all requests for creative services. This includes visuals that support the department’s various communications initiatives for use on social media, web, in ad campaigns and more, resulting in communications that are targeted, yet inclusive of all Canadians.
  - We advise programs to include GBA+ considerations when they conduct consultations or surveys. When conducting contracted Public Opinion Research, we consider GBA+ is when we develop the target groups and sample size for research studies.
- We follow all GC Web Standards to make sure our content is accessible to all and available in both official languages. This also ensures accessibility and recognition of Canada’s two official languages is integrated into our processes.

### Budgetary financial resources (dollars)

2019–20 Main Estimates	2019–20 Planned spending	2019–20 Total authorities available for use	2019–20 Actual spending (authorities used)	2019–20 Difference (Actual spending minus Planned spending)
194,374,706	194,374,706	215,011,718	216,950,535	22,575,829

### Human resources (full-time equivalents)

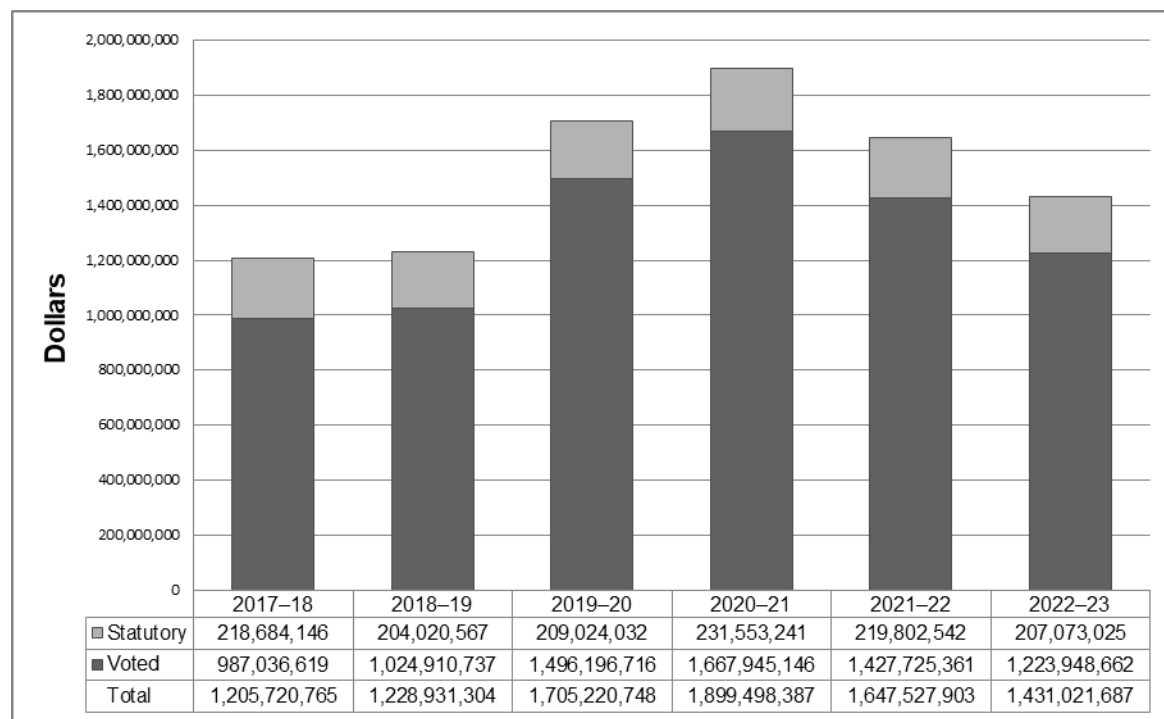
2019–20 Planned full-time equivalents	2019–20 Actual full-time equivalents	2019–20 Difference (Actual full-time equivalents minus Planned full-time equivalents)
1,188	1,448	260

## Analysis of trends in spending and human resources

### Actual expenditures

#### Departmental spending trend graph

The following graph presents planned (voted and statutory spending) over time (from 2017-18 to 2019-20) and planned expenditures (from 2020-21 to 2022-23):



As illustrated in the departmental spending graph, actual expenditures remained relatively stable between 2017-18 and 2018-19. The 2019-20 increase in actual expenditures is primarily attributed to G&C funding for the National Trade Corridors Fund (part of the Trade and Transportation Corridor Initiative), the Port Asset Transfer Program and Zero-emission vehicles.

Spending is expected to continue to increase in 2020-21 mostly as a result of increased G&C funding for the National Trade Corridors Fund (part of the Trade and Transportation Corridor Initiative), Incentives for Zero-Emission Vehicles Program and the statutory payment to St. Lawrence Seaway Management Corporation.

Looking ahead to 2021-22 and 2022-23, planned spending is declining mainly due to initiatives that have changes in expected demand for resources or are reaching their maturity dates, such as Incentives for Zero-Emission Vehicles Program, the Federal Contaminated Sites Action Plan, the Gateways and Border Crossings Fund, and the Program to Protect Oceans and Waterways.

The 2020-21 and ongoing levels are based on information provided in the 2020-21 Departmental Plan. As such, they do not include other initiatives announced after Budget 2019.

### Budgetary performance summary for Core Responsibilities and Internal Services (dollars)

Core responsibilities and Internal Services	2019–20 Main Estimates	2019–20 Planned spending	2020–21 Planned spending	2021–22 Planned spending	2019–20 Total authorities available for use	2017–18 Actual spending (authorities used)	2018–19 Actual spending (authorities used)	2019–20 Actual spending (authorities used)
CR 1: Safe and Secure Transportation System	374,213,870	374,213,870	440,999,964	433,325,596	484,807,687	N/A	422,517,722	453,703,550
SO 3: A Safe and Secure Transportation System	N/A	N/A	N/A	N/A	N/A	444,241,305	N/A	N/A
CR 2: Green and Innovative Transportation System	252,398,761	252,398,761	321,204,902	231,208,287	553,770,224	N/A	165,832,698	389,635,911
SO 2: A Clean Transportation System	N/A	N/A	N/A	N/A	N/A	113,335,925	N/A	N/A
CR 3: Efficient Transportation System	879,349,998	879,349,998	927,054,699	774,071,457	906,481,002	N/A	443,958,943	644,930,752
SO 3: An Efficient Transportation System	N/A	N/A	N/A	N/A	N/A	455,318,523	N/A	N/A

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Budget Implementation vote – unallocated authorities	162,255,496	N/A	N/A	N/A	15,608,148	N/A	N/A	N/A
Subtotal	1,668,218,125	1,505,962,629	1,689,259,565	1,438,605,340	1,960,667,061	1,012,895,753	1,032,309,363	1,488,270,213
Internal Services	194,374,706	194,374,706	210,238,822	208,922,563	215,011,718	192,825,012	196,621,941	216,950,535
Total	1,862,592,831	1,700,337,335	1,899,498,387	1,647,527,903	2,175,678,779	1,205,720,765	1,228,931,304	1,705,220,748

**Actual human resources**

**Human resources summary for core responsibilities and Internal Services**

Core responsibilities and Internal Services	2017–18 Actual full-time equivalents	2018–19 Actual full-time equivalents	2019–20 Planned full-time equivalents	2019–20 Actual full-time equivalents	2020–21 Planned full-time equivalents	2021–22 Planned full-time equivalents
CR 1: Safe and Secure Transportation System	N/A	3,371	3,134	3,479	3,603	3,587
SO 3: A Safe and Secure Transportation System	3,242	N/A	N/A	N/A	N/A	N/A
CR 2: Green and Innovative Transportation System	N/A	571	606	629	647	614
SO 2: A Clean Transportation System	325	N/A	N/A	N/A	N/A	N/A
CR 3: Efficient Transportation System	N/A	471	463	488	518	514
SO 3: An Efficient Transportation System	426	N/A	N/A	N/A	N/A	N/A
Subtotal	3,993	4,413	4,203	4,596	4,768	4,715
Internal Services	1,221	1,377	1,188	1,448	1,346	1,316

Total	5,214	5,790	5,391	6,044	6,114	6,031
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TC's actual FTE (full-time equivalent) count peaked in 2020-21 at 6,114. By that time, the Department will have initiatives reaching their maturity date, and with the accompanying decrease in funding, the Department has accordingly decreased its planned FTE levels starting the following year.

The planned FTE information within our Departmental Results Report was established based on historical information and adjusted for government decisions that either increase (e.g., new programs) or decrease (change in mandate or priorities) the number of FTEs within TC.

The decrease between 2018-19 and 2019-20 FTEs is mainly due to sunset of items such as funding to enhance the safety of railways and the transportation of dangerous goods (Budget 2016) and a motor vehicle safety.

The 2019-20 actual FTE was higher than the planned FTE, as TC's Budget 2019 funding items were not included in the plans when the 2019-20 Departmental Plan was produced for initiatives such as Safe and Secure Road and Rail Transportation, Delivering Better Service for Air Travellers, etc.

## Expenditures by vote

For information on Transport Canada's organizational voted and statutory expenditures, consult the [Public Accounts of Canada 2019–2020](#).<sup>lxxix</sup>

## Government of Canada spending and activities

Information on the alignment of Transport Canada's spending with the Government of Canada's spending and activities is available in [GC InfoBase](#).<sup>lxxx</sup>

## Financial statements and financial statements highlights

### Financial statements

Transport Canada's [financial statements \(unaudited\) for the year ended March 31, 2019](#)<sup>lxxxi</sup>, are available on the departmental website.

## Financial statement highlights

### Condensed Statement of Operations (unaudited) for the year ended March 31, 2020 (dollars)

Financial information	2019–20 Planned results	2019–20 Actual results	2018–19 Actual results	Difference (2019–20 Actual results minus 2019–20 Planned results)	Difference (2019–20 Actual results minus 2018–19 Actual results)
Total expenses	1,861,380,319	1,877,798,728	1,405,740,298	16,418,409	472,058,430
Total revenues	77,951,887	81,744,706	76,410,828	3,792,819	5,333,878
Net cost of operations before government funding and transfers	1,783,428,432	1,796,054,022	1,329,329,470	12,625,590	466,724,552

### Condensed Statement of Financial Position (unaudited) as of March 31, 2020 (dollars)

Financial information	2019–20	2018–19	Difference (2019–20 minus 2018–19)
Total net liabilities	1,344,573,347	1,199,056,552	145,516,795
Total net financial assets	416,510,386	394,354,595	22,155,791
Departmental net debt	928,062,961	804,701,957	123,361,004
Total non-financial assets	2,817,763,123	2,820,957,563	(3,194,440)
Departmental net financial position	1,889,700,162	2,016,255,606	(126,555,444)



## Additional information

### Organizational profile

**Appropriate minister[s]:** The Honourable Marc Garneau, Minister of Transport

**Institutional head:** Michael Keenan, Deputy Minister

**Ministerial portfolio:** Transport Canada

The [Transport Canada Portfolio](#)<sup>lxxxii</sup> includes:

- Transport Canada;
- Shared governance organizations (e.g., the [St. Lawrence Seaway Management Corporation](#))<sup>lxxxiii</sup>; and
- Crown corporations (e.g., the [Great Lakes Pilotage Authority](#))

Grouping these organizations into one portfolio allows for integrated decision making on transportation issues.

**Enabling instrument[s]:** [Department of Transport Act](#)<sup>lxxxiv</sup> (R.S., 1985, c. T-18)

**Year of incorporation / commencement:** 1936

### Raison d'être, mandate and role: who we are and what we do

“Raison d'être, mandate and role: who we are and what we do” is available on [Transport Canada's website](#)<sup>lxxxv</sup>.

For more information on the department's organizational mandate letter commitments, see the [Minister's mandate letter](#)<sup>lxxxvi</sup>.

### Reporting framework

Transport Canada's Departmental Results Framework and Program Inventory of record for 2019-20 are shown below.

#### Core Responsibility 1: Safe and Secure Transportation System

##### *Result 1: A safe transportation system*

Result Indicator: Accident rate over a 10-year period (air)

Result Indicator: Fatality rate over a 10-year period (air)

Result Indicator: Accident rate over a 10-year period (marine)

Result Indicator: Fatality rate over a 10-year period (marine)

Result Indicator: Accident rate over a 10-year period (rail)

Result Indicator: Fatality rate over a 10-year period (rail)

Result Indicator: Rate of reportable road traffic collisions in Canada

Result Indicator: Rate of serious injuries in reportable road traffic collisions in Canada

Result Indicator: Rate of fatalities in reportable road traffic collisions in Canada

Result Indicator: Rate of reportable releases of dangerous goods per year

***Result 2: A secure transportation system***

Result Indicator: Rate of compliance of air sector operators with Transport Canada's security regulations

Result Indicator: Rate of compliance of marine sector operators with Transport Canada's security regulations

Result Indicator: Rate of refusals of new Transportation Security Clearance applications

Result Indicator: Rate of Suspensions of Transportation Security clearances

Result Indicator: Rate of cancellations of Transportation Security Clearances

***Result 3: A modern safety and security regime that supports economic growth***

Result Indicator: Percentage of Transport Canada security regulations aligned with international transportation standards (air)

Result Indicator: Percentage of Transport Canada security regulations aligned with international transportation standards (marine)

Result Indicator: Percentage of Transport Canada security regulations aligned with international transportation standards (transportation of dangerous goods)

Result Indicator: Percentage of client requests for safety or security authorizations that meet Transport Canada's service standards (air)

Result Indicator: Percentage of client requests for safety or security authorizations that meet Transport Canada's service standards (marine)

Result Indicator: Percentage of client requests for safety authorizations that meet Transport Canada's service standards (transportation of dangerous goods)

Result Indicator: Percentage of new Canadian Rail Safety operating and equipment safety rules aligned with the US Rail Safety operating and equipment rules.

Result Indicator: Percentage of Transport Canada safety regulations aligned with international transportation standards (air).

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Result Indicator: Percentage of Transport Canada safety regulations aligned with international transportation standards (marine).

*Program Inventory under Core Responsibility 1:*

- Aviation Safety Regulatory Framework
- Aviation Safety Oversight
- Aviation Safety Certification
- Aviation Security Regulatory Framework
- Aviation Security Oversight
- Aircraft Services
- Marine Safety Regulatory Framework
- Marine Safety Oversight
- Marine Safety Certification
- Marine Security Regulatory Framework
- Marine Security Oversight
- Navigation Protection Program
- Rail Safety Regulatory Framework
- Rail Safety Oversight
- Rail Safety Improvement Program
- Motor Vehicle Safety Regulatory Framework Program
- Motor Vehicle Safety Oversight Program
- Intermodal Surface Security Regulatory Framework
- Intermodal Surface Security Oversight
- Transportation of Dangerous Goods Regulatory Framework
- Transportation of Dangerous Goods Oversight
- Transportation of Dangerous Goods Technical Support
- Multimodal Safety and Security Services
- Security Screening Certification
- Emergency Management

**Core Responsibility 2: Green and Innovative Transportation System**

***Result 4: Harmful air emissions from transportation in Canada are reduced***

Result Indicator: Greenhouse gas emissions intensity for Canadian commercial air carriers

Result Indicator: Greenhouse gas emissions intensity for domestic marine transportation

Result Indicator: Greenhouse gas emissions intensity for freight rail transportation

***Result 5: Canada's oceans and marine environments are protected from marine shipping impacts***

Result Indicator: Rate of spills into Canada's oceans and marine environments

***Result 6: A transportation system that supports innovation***

Result Indicator: Number of new aeronautical products certified

Result Indicator: The number of motor vehicle features introduced in Canada through the use of Transport Canada's regulatory tools that facilitate innovative technologies

*Program Inventory under Core Responsibility 2*

- Climate Change and Clean Air
- Protecting Oceans and Waterways
- Environmental Stewardship of Transportation
- Transportation Innovation
- Indigenous Partnerships and Engagement

**Core Responsibility 3: Efficient Transportation System**

***Result 7: Transportation corridors get products reliably to market***

Result Indicator: End-to-end transit time of containerized freight arriving from ports in Asia

Result Indicator: End-to-end transit time of a select grouping of commodities, such as grains, departing from Canada to Asia

Result Indicator: End-to-end, rail transit time of containers along the trade corridor from Canadian west coast ports to Chicago, including border crossing time

Result Indicator: End-to-end, Canada-side, truck transit time of general freight along the Toronto to United States trade corridor, including border crossing time

***Result 8: Canadian air travelers benefit from choice and increased service***

Result Indicator: Frequency of flights on air service routes within Canada and between Canada and other countries

Result Indicator: Number of air service routes within Canada and between Canada and other countries

***Result 9: Transport Canada manages its assets effectively***

Result Indicator: Availability of Transport Canada owned and managed airports

Result indicator: Availability of Transport Canada owned and managed ports

Result indicator: Availability of Transport Canada owned and managed ferries

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### *Program Inventory under Core Responsibility 3*

- Transportation Marketplace Frameworks
- Transportation Analysis
- National Trade Corridors
- Transportation Infrastructure

## **Supporting information on the program inventory**

Financial, human resources and performance information for Transport Canada's Program Inventory is available in [GC InfoBase](#)<sup>lxxxvii</sup>.

## **Supplementary information tables**

The following supplementary information tables are available on [Transport Canada's website](#)<sup>lxxxviii</sup>:

- Departmental Sustainable Development Strategy
- Details on transfer payment programs of \$5 million or more
- Gender-based analysis plus
- Horizontal initiative – Oceans Protection Plan
- Status report on transformational and major Crown projects
- Up-front multi-year funding

## **Federal tax expenditures**

The tax system can be used to achieve public policy objectives by applying of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance Canada publishes cost estimates and projections for these measures each year in the [Report on Federal Tax Expenditures](#)<sup>lxxxix</sup>. This report also provides detailed background information on tax expenditures, including descriptions, objectives, historical information and references to related federal spending programs. The tax measures presented in this report are the responsibility of the Minister of Finance.

## **Organizational contact information**

Email: [Questions@tc.gc.ca](mailto:Questions@tc.gc.ca)

Phone: 613-990-2309

Toll Free: 1-866-995-9737

Teletypewriter (TTY): 1-888-675-6863

Fax: 613-954-4731

Mailing Address:

Transport Canada (ADI)

330 Sparks Street

Ottawa, ON

K1A 0N5

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## Appendix 1: Definitions

### **appropriation** (crédit)

Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

### **budgetary expenditures** (dépenses budgétaires)

Operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

### **core responsibility** (responsabilité essentielle)

An enduring function or role performed by a department. The intentions of the department with respect to a core responsibility are reflected in one or more related departmental results that the department seeks to contribute to or influence.

### **Departmental Plan** (plan ministériel)

A report on the plans and expected performance of an appropriated department over a 3-year period. Departmental Plans are usually tabled in Parliament each spring.

### **departmental priority** (priorité)

A plan or project that a department has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired departmental results.

### **departmental result** (résultat ministériel)

A consequence or outcome that a department seeks to achieve. A departmental result is often outside departments' immediate control, but it should be influenced by program-level outcomes.

### **departmental result indicator** (indicateur de résultat ministériel)

A quantitative measure of progress on a departmental result.

### **departmental results framework** (cadre ministériel des résultats)

A framework that connects the department's core responsibilities to its departmental results and departmental result indicators.

### **Departmental Results Report** (rapport sur les résultats ministériels)

A report on a department's actual accomplishments against the plans, priorities and expected results set out in the corresponding Departmental Plan.

### **experimentation** (expérimentation)

The conducting of activities that seek to first explore, then test and compare the effects and impacts of policies and interventions in order to inform evidence-based decision-making, and improve outcomes for Canadians, by learning what works, for whom and in what circumstances. Experimentation is related to, but distinct from innovation (the trying of new things), because it involves a rigorous comparison of results. For example, using a new website to communicate with Canadians can be an innovation; systematically testing the new website against existing outreach tools or an old website to see which one leads to more engagement, is experimentation.

**full-time equivalent** (équivalent temps plein)

A measure of the extent to which an employee represents a full person-year charge against a departmental budget. For a particular position, the full-time equivalent figure is the ratio of number of hours the person actually works divided by the standard number of hours set out in the person's collective agreement.

**gender-based analysis plus (GBA+)** (analyse comparative entre les sexes plus [ACS+])

An analytical process used to assess how diverse groups of women, men and gender-diverse people experience policies, programs and services based on multiple factors including race ethnicity, religion, age, and mental or physical disability.

**government-wide priorities** (priorités pangouvernementales)

For the purpose of the 2019–20 Departmental Results Report, those high-level themes outlining the government's agenda in the 2019 Speech from the Throne, namely: Fighting climate change; Strengthening the Middle Class; Walking the road of reconciliation; Keeping Canadians safe and healthy; and Positioning Canada for success in an uncertain world.

**horizontal initiative** (initiative horizontale)

An initiative where two or more federal organizations are given funding to pursue a shared outcome, often linked to a government priority.

**non-budgetary expenditures** (dépenses non budgétaires)

Net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

**performance** (rendement)

What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve, and how well lessons learned have been identified.

**performance indicator** (indicateur de rendement)



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A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

**performance reporting** (production de rapports sur le rendement)

The process of communicating evidence-based performance information. Performance reporting supports decision making, accountability and transparency.

**plan** (plan)

The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally, a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead to the expected result.

**planned spending** (dépenses prévues)

For Departmental Plans and Departmental Results Reports, planned spending refers to those amounts presented in Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their Departmental Plans and Departmental Results Reports.

**program** (programme)

Individual or groups of services, activities or combinations thereof that are managed together within the department and focus on a specific set of outputs, outcomes or service levels.

**program inventory** (répertoire des programmes)

Identifies all the department's programs and describes how resources are organized to contribute to the department's core responsibilities and results.

**result** (résultat)

A consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead they are within the area of the organization's influence.

**statutory expenditures** (dépenses législatives)

Expenditures that Parliament has approved through legislation other than appropriation acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

**target** (cible)

A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

**voted expenditures** (dépenses votées)

Expenditures that Parliament approves annually through an appropriation act. The vote wording becomes the governing conditions under which these expenditures may be made.

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## Endnotes

- <sup>i</sup> Transport Canada’s Departmental Result Reports, <https://tc.canada.ca/en/corporate-services/transparency/departmental-results-reports-drr>
- <sup>ii</sup> Transportation 2030: A Strategic Plan for the Future of Transportation in Canada, <https://canada.ca/en/initiatives/transportation-2030-strategic-plan-future-transportation-canada>
- <sup>iii</sup> National Trade Corridors Fund, <https://www.tc.gc.ca/en/programs-policies/programs/national-trade-corridors-fund.html>
- <sup>iv</sup> Air Passenger Protection Regulations, <https://laws.justice.gc.ca/eng/regulations/SOR-2019-150/index.html>
- <sup>vv</sup> An Act to Ensure a Barrier Free Canada, <https://laws-lois.justice.gc.ca/eng/acts/A-0.6/>
- <sup>vi</sup> Canada Transportation Act, <https://laws-lois.justice.gc.ca/eng/acts/c-10.4/page-39.html#h-57102>
- <sup>vii</sup> International Civil Aviation Organization, <https://www.icao.int/Pages/default.aspx>
- <sup>viii</sup> Accessible Transportation for Persons with Disabilities Regulations, <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2019-244/index.html>
- <sup>ix</sup> Ocean-Wise Conservation Association, <https://ocean.org/>
- <sup>x</sup> Oceans Protection Plan, [https://www.canada.ca/en/transport-canada/news/2017/10/the\\_oceans\\_protectionplan.html](https://www.canada.ca/en/transport-canada/news/2017/10/the_oceans_protectionplan.html)
- <sup>xi</sup> Wrecked, Abandoned or Hazardous Vessels Act, <https://laws-lois.justice.gc.ca/eng/acts/W-12.3/index.html>
- <sup>xii</sup> Pilotage Act, [https://www.canada.ca/en/transport-canada/news/2017/05/pilotage\\_act\\_review.html](https://www.canada.ca/en/transport-canada/news/2017/05/pilotage_act_review.html)
- <sup>xiii</sup> Arctic and Northern Policy Framework, <https://www.rcaanc-cirnac.gc.ca/eng/1562782976772/1562783551358>
- <sup>xiv</sup> Motor Vehicle Safety Act, <https://laws-lois.justice.gc.ca/eng/acts/m-10.01/>
- <sup>xv</sup> Trans Mountain Expansion Project, <https://www.canada.ca/en/campaign/trans-mountain.html>
- <sup>xvi</sup> Canada Energy Regulator’s Report on the Reconsideration of the Transmountain Pipeline expansion, <https://www.cer-rec.gc.ca/pp/ctnflng/mjrpp/trnsmntnxpnsn/trnsmntnxpnsnrprt-eng.html>
- <sup>xvii</sup> Canadian Aviation Regulations Part IX, <https://lois-laws.justice.gc.ca/eng/regulations/SOR-96-433/FullText.html#s-900.01>
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